

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS

UNITED STATES OF AMERICA,  
Plaintiff,

v.

TOTAL PETROCHEMICALS USA, INC.,  
Defendant.

CIVIL ACTION NO.

CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America ("Plaintiff" or "United States"), by the authority of the Attorney General of the United States and through its undersigned counsel, acting at the request and on behalf of the United States Environmental Protection Agency ("EPA"), has simultaneously filed a Complaint against and lodged this Consent Decree with Defendant, TOTAL Petrochemicals USA, Inc. ("TOTAL"), for alleged environmental violations at TOTAL's petroleum refinery located in Port Arthur, Texas ("Refinery");

WHEREAS, the United States alleges that TOTAL has violated and/or continues to violate various Clean Air Act statutory and regulatory provisions, including, but not limited to:

1) New Source Performance Standards ("NSPS") found at 40 C.F.R. Part 60, Subparts A and J, promulgated pursuant to Section 111 of the Act, 42 U.S.C. § 7411 ("Refinery NSPS Regulations"), for sulfur recovery plants, fuel gas combustion devices, and fluid catalytic cracking unit catalyst regenerators; and

2) National Emission Standards for Hazardous Air Pollutants ("NESHAP") for Benzene Waste Operations promulgated pursuant to Section 112(e) of the Act, 42 U.S.C. § 7412(e), and found at 40 C.F.R. Part 61, Subpart FF ("Benzene Waste NESHAP Regulations");

WHEREAS, the United States also specifically alleges that, upon information and belief, TOTAL has been and/or continues to be in violation of the State Implementation Plan ("SIP") and other state and local rules, regulations, and permits adopted or issued by the State of Texas in which the Refinery is located to the extent that such plans, rules, regulations, and permits implement, adopt, or incorporate the above-described federal requirements;

WHEREAS, TOTAL denies that it has violated and/or continues to violate the foregoing statutory and regulatory requirements, SIP provisions, and other state and local rules, regulations,

and permits incorporating and implementing the foregoing federal requirements, and maintains that it has been and remains in compliance with all applicable statutes, regulations, and permits and is not liable for civil penalties and injunctive relief as alleged in the Complaint;

WHEREAS, the United States is engaged in a nationwide federal strategy for achieving cooperative agreements with petroleum refineries to achieve across-the-board reductions in emissions (“Global Settlement Strategy”);

WHEREAS, TOTAL consents to the simultaneous filing of the Complaint and lodging of this Consent Decree, despite its denial of the allegations in the Complaint, to accomplish its objective of cooperatively reconciling the goals of the United States and TOTAL under the Clean Air Act and the corollary state and local statutes, and therefore agrees to undertake the installation of air pollution control equipment and enhancements to its air pollution management practices at the Refinery to reduce air emissions by participating in the Global Settlement Strategy;

WHEREAS, by entering into this Consent Decree, TOTAL is committed to proactively resolving environmental concerns relating to its operations at the Refinery;

WHEREAS, with respect to the provisions of Part VI (“New Source Performance Standards and Flaring”), EPA maintains that “[i]t is the intent of the proposed standard [40 C.F.R. § 60.104] that hydrogen-sulfide-rich gases exiting the amine regenerator [or sour water stripper gases] be directed to an appropriate recovery facility, such as a Claus sulfur plant,” see Information for Proposed New Source Performance Standards; Asphalt Concrete Plants, Petroleum Refineries, Storage Vessels, Standard Lead Smelters and Refineries, Brass or Bronze Ingot Production Plants, Iron and Steel Plants, Sewage Treatment Plants, Vol. 1, Main Text at 28;

WHEREAS, EPA further maintains that the failure to direct hydrogen-sulfide-rich gases to an appropriate recovery facility – and instead to flare such gases under circumstances that are not sudden or infrequent or that are reasonably preventable – circumvents the purposes and intentions of the standards at 40 C.F.R. Part 60, Subpart J;

WHEREAS, EPA recognizes that “Malfunctions,” as defined in Paragraph 10.Y. and 40 C.F.R. § 60.2, of the “Sulfur Recovery Plants” or of “Upstream Process Units” may result in flaring of “Acid Gas” or “Sour Water Stripper Gas” on occasion, as those terms are defined herein, and that such flaring does not violate 40 C.F.R. § 60.11(d) or NSPS Subpart J if the owner or operator, to the extent practicable, maintains and operates such units in a manner consistent with good air pollution control practice for minimizing emissions during these periods;

WHEREAS, discussions between the Parties have resulted in the settlement embodied in this Consent Decree;

WHEREAS, TOTAL has waived any applicable federal, state, or local requirements of statutory notice of the alleged violations;

WHEREAS, by signing this Consent Decree, TOTAL has waived the right of service of process, and the United States agrees that TOTAL need not answer the Complaint;

WHEREAS, EPA sought and TOTAL provided a substantial amount of information concerning Refinery operations and configuration;

WHEREAS, the parties engaged in numerous meetings over the past three years to resolve this matter;

WHEREAS, notwithstanding the foregoing reservations, the Parties agree that:

(i) settlement of the matters set forth in the Complaint is in the best interests of the Parties and

the public; and (ii) entry of this Consent Decree without litigation is the most appropriate means of resolving this matter; and

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated at arms length and in good faith and that this Consent Decree is fair, reasonable, and in the public interest;

NOW THEREFORE, with respect to the matters set forth in the Complaint and in Part XX ("Effect of Settlement"), and before the taking of any testimony, without adjudication of any issue of fact or law, and upon the consent and agreement of the Parties to this Consent Decree, it is hereby ORDERED, ADJUDGED, and DECREED as follows:

#### **I. JURISDICTION AND VENUE**

1. This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345, and 1355. In addition, this Court has jurisdiction over the subject matter of this action pursuant to Sections 113(b) and 167 of the CAA, 42 U.S.C. §§ 7413(b) and 7477. The United States' Complaint states a claim upon which relief may be granted for injunctive relief against TOTAL under the Clean Air Act. Authority to bring this suit is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519 and Section 305 of the CAA, 42 U.S.C. § 7605.

2. Venue is proper in the Eastern District of Texas pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), and 28 U.S.C. §§ 1391(b) and (c) and 1395(a). TOTAL consents to the personal jurisdiction of this Court and waives any objections to venue in this District.

3. Notice of the commencement of this action has been given to the State of Texas in accordance with Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1), and as required by Section 113(b) of the CAA, 42 U.S.C. § 7413(b).

## **II. APPLICABILITY AND BINDING EFFECT**

4. The provisions of this Consent Decree shall apply to the Refinery, and shall be binding upon the United States and TOTAL and its agents, successors, and assigns.

5. TOTAL agrees not to contest the validity of this Consent Decree in any subsequent proceeding to implement or enforce its terms. TOTAL further agrees, in any action to enforce this Consent Decree, that it shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

6. Effective from the Date of Entry of this Consent Decree until termination pursuant to Part XXII, TOTAL agrees that the Refinery is covered by this Consent Decree. Effective from the Date of Entry of this Consent Decree, TOTAL shall give written notice of this Consent Decree to any successors in interest to the Refinery prior to the transfer of ownership or operation of any portion of the Refinery and shall provide a copy of this Consent Decree to any successor in interest. TOTAL shall notify the United States, in accordance with the notice provisions set forth in Paragraph 264 ("Notice"), of any successor in interest at least 30 days prior to any such transfer.

7. TOTAL shall condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling, non-operational shareholder interest) in the Refinery upon the execution by the transferee of a modification to this Consent Decree, which makes the terms and conditions of this Consent Decree that apply to the Refinery applicable to the transferee. In the event of such transfer, TOTAL shall notify the United States in accordance with the notice provisions in Paragraph 264. By no earlier than 30 days after such notice, TOTAL may file a motion to modify this Consent Decree with the Court to make the terms and conditions of this Consent Decree applicable to the transferee. TOTAL shall be

released from the obligations and liabilities of this Consent Decree unless the United States opposes the motion and the Court finds that the transferee does not have the financial and technical ability to assume the obligations and liabilities under this Consent Decree.

8. Except as provided in Paragraph 7, TOTAL shall be solely responsible for ensuring that performance of the work contemplated under this Consent Decree is undertaken in accordance with the deadlines and requirements contained in this Consent Decree and any attachments hereto. TOTAL shall provide a copy of the applicable provisions of this Consent Decree to each consulting or contracting firm that is retained to perform work required under this Consent Decree upon execution of any contract relating to such work. Copies of the relevant portions of this Consent Decree do not need to be supplied to firms who are retained solely to supply materials or equipment to satisfy the requirements of this Consent Decree.

### **III. OBJECTIVES**

9. It is the purpose of the Parties to this Consent Decree to further the objectives of the Clean Air Act.

### **IV. DEFINITIONS**

10. Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the Clean Air Act and the implementing regulations promulgated thereunder. The following terms used in this Consent Decree shall be defined, solely for purposes of this Consent Decree and the reports and documents submitted pursuant thereto, as follows:

- A. "365-day rolling average" shall include only operating days.
- B. "7-day rolling average" shall include only operating days.
- C. "Acid Gas" shall mean any gas that contains hydrogen sulfide and is generated at a refinery by the regeneration of an amine solution.

D. "Acid Gas Flaring" or "AG Flaring" shall mean the combustion of an Acid Gas and/or Sour Water Stripper Gas in an AG Flaring Device.

E. "Acid Gas Flaring Device" or "AG Flaring Device" shall mean any device at the Refinery, including but not limited to those devices listed in Paragraph 38, that is used for the purpose of combusting Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce sulfur.

F. "Acid Gas Flaring Incident" or "AG Flaring Incident" shall mean the continuous or intermittent combustion of Acid Gas and/or Sour Water Stripper Gas in one or more AG Flaring Devices at the Refinery that results in the emission of sulfur dioxide equal to, or in excess of, 500 pounds in any 24-hour period; provided, however, that if 500 pounds or more of sulfur dioxide has been emitted in a 24-hour period and flaring continues into subsequent, contiguous, non-overlapping 24-hour period(s), each period of which results in emissions equal to, or in excess of, 500 pounds of sulfur dioxide, then only one AG Flaring Incident shall have occurred.

Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of flaring within the AG Flaring Incident.

G. "Calendar Quarter" shall mean the three month period ending on March 31st, June 30th, September 30th, and December 31st.

H. "CEMS" shall mean continuous emissions monitoring system.

I. "CO" shall mean carbon monoxide.

J. "COMS" shall mean continuous opacity monitoring system.

K. "Consent Decree" or "Decree" shall mean this Consent Decree, including any and all appendices attached to this Consent Decree.

L. "Covered Heaters and Boilers" shall mean all heaters or boilers at the Refinery

with a heat input capacity of 40 MMBTU/hr (HHV) or greater regardless of any firing rate permit limitations.

M. "Date of Entry" shall mean the date on which this Consent Decree is approved and signed by the United States District Court Judge.

N. "Date of Lodging" shall mean the date this Consent Decree is lodged with the United States District Court.

O. "Date of Termination" shall mean termination of this Consent Decree pursuant to Part XXII.

P. "Day" or "Days" shall mean a calendar day or days unless expressly stated to be a Working Day or Days. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next Working Day.

Q. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

R. "FCCU" shall mean a fluidized catalytic cracking unit and its regenerator and associated CO boiler(s) where present.

S. "FCCUCR" shall mean a fluidized catalytic cracking unit catalyst regenerator, as defined in 40 C.F.R. § 60.101.

T. "Flaring Device" shall mean an AG and/or a HC Flaring Device.

U. "Fuel Oil" shall mean any liquid fossil fuel with sulfur content of greater than 0.05% by weight.

V. "Hydrocarbon Flaring" or "HC Flaring" shall mean the combustion of refinery-generated gases, except for Acid Gas, Sour Water Stripper Gas, and/or Tail Gas, in a Hydrocarbon

Flaring Device.

W. "Hydrocarbon Flaring Device" or "HC Flaring Device" shall mean a flare device, including but not limited to all devices listed in Paragraph 38, used to safely control (through combustion) any excess volume of a refinery generated gas other than Acid Gas, Sour Water Stripper Gas, and/or Tail Gas.

X. "Hydrocarbon Flaring Incident" or "HC Flaring Incident" shall mean continuous or intermittent Hydrocarbon Flaring, except for Acid Gas, Sour Water Stripper Gas, or Tail Gas, at a Hydrocarbon Flaring Device that results in the emission of sulfur dioxide equal to or greater than five-hundred (500) pounds in any 24-hour period; provided, however, that if 500 pounds or more of sulfur dioxide has been emitted in any 24-hour period and flaring continues into subsequent, contiguous, non-overlapping 24-hour period(s), each period of which results in emissions equal to, or in excess of, 500 pounds of sulfur dioxide, then only one HC Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the HC Flaring Incident.

Y. "Malfunction" shall mean, as specified in 40 C.F.R. § 60.2, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions."

Z. "Next Generation Ultra-Low NO<sub>x</sub> Burners" or "Next Generation ULNBs" shall mean those burners that are designed to achieve a NO<sub>x</sub> emission rate of less than or equal to 0.020 lb NO<sub>x</sub>/mmBTU (HHV) when firing natural gas at 3% stack oxygen at full design load without air preheat, even if upon installation actual emissions exceed 0.020 lb NO<sub>x</sub>/mmBTU (HHV).

AA. "NOx" shall mean nitrogen oxides.

BB. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral.

CC. "Part" shall mean a portion of this Consent Decree identified by a Roman numeral.

DD. "PM" shall mean particulate matter as measured by 40 C.F.R. Part 60, Appendix A, Method 5B or 5F (front half only).

EE. "Parties" shall mean the United States and TOTAL.

FF. "Refinery" shall mean the elements comprising the petroleum refining facility and associated operations, located at the intersection of Highway 366 and 32nd Street in Port Arthur, Texas, that is operated by TOTAL Petrochemicals USA, Inc., but excluding the adjacent BASF FINA Petrochemicals naphtha steam cracker and the adjacent Sabina Petrochemicals LLC C4 olefins complex, except that materials containing benzene that move from either of those two adjacent facilities into the Refinery are covered by the requirements of this Decree to the extent that they come within the scope of 40 C.F.R. Part 61, Subpart FF.

GG. "Root Cause" shall mean the primary cause(s) of an AG Flaring Incident(s), Hydrocarbon Flaring Incident(s), or a Tail Gas Incident(s) as determined through a process of investigation.

HH. "Section" shall mean a portion of this Consent Decree identified by a capital letter.

II. "Selective Catalytic Reduction" or "SCR" shall mean an air pollution control device consisting of ammonia injection and a catalyst bed to selectively catalyze the reduction of NOx with ammonia to nitrogen and water.

- JJ. "Shutdown," as specified in 40 C.F.R. § 60.2, shall mean the cessation of operation of equipment for any purpose.
- KK. "Sour Water Stripper Gas" or "SWS Gas" shall mean the gas produced by the process of stripping refinery sour water.
- LL. "SO<sub>2</sub>" shall mean sulfur dioxide.
- MM. "Startup," as specified in 40 C.F.R. § 60.2, shall mean the setting in operation of equipment for any purpose.
- NN. "Sulfur Recovery Plant" or "SRP" shall mean a process unit that recovers sulfur from hydrogen sulfide by a vapor phase catalytic reaction of sulfur dioxide and hydrogen sulfide.
- OO. "TOTAL" shall mean Defendant, TOTAL Petrochemicals USA, Inc., formerly known as Atofina Petrochemicals, Inc. and also formerly known as Fina Oil and Chemical Co.
- PP. "Tail Gas" ("TG") shall mean exhaust from the Claus trains and the Tail Gas Unit section of an SRP.
- QQ. "Tail Gas Unit" or "TGU" shall mean a control system using a technology for reducing emissions of sulfur compounds from a Sulfur Recovery Plant.
- RR. "Tail Gas Incident" shall mean combustion of Tail Gas that either: (i) is combusted in a flare and results in 500 pounds or more of SO<sub>2</sub> emissions in any 24-hour period; or (ii) is combusted in a thermal incinerator and results in excess emissions of 500 pounds or more of SO<sub>2</sub> in any 24-hour period. Only those time periods that are in excess of a SO<sub>2</sub> concentration of 250 ppm (rolling twelve-hour average) shall be used to determine the amount of excess SO<sub>2</sub> emissions from the incinerator. TOTAL shall use good engineering judgment and/or other monitoring data during periods in which the SO<sub>2</sub> continuous emission analyzer has exceeded

the range of the instrument or is out of service.

SS. "Torch Oil" shall mean FCCU feedstock or cycle oils that are combusted in the FCCU regenerator to assist in starting up or restarting the FCCU, to allow hot standby of the FCCU, or to maintain regenerator heat balance in the FCCU.

TT. "Upstream Process Units" shall mean all amine contactors, amine scrubbers, and sour water strippers at the Refinery, as well as all process units at the Refinery that produce gaseous or aqueous waste streams that are processed at amine contactors, amine scrubbers, or sour water strippers.

UU. "Working Day" or "Working Days" shall mean any Day or Days except Saturday, Sunday, or a federal holiday.

**V. NEW SOURCE REVIEW/PREVENTION OF SIGNIFICANT DETERIORATION REQUIREMENTS ("NSR/PSD")**

**A. Control of NO<sub>x</sub> Emissions from FCCU**

11. By no later than December 31, 2009, TOTAL shall limit NO<sub>x</sub> emissions from any FCCU at the Refinery to 30 ppmvd NO<sub>x</sub> or less on a 365-day rolling average basis and 60 ppmvd NO<sub>x</sub> or less on a 7-day rolling average basis, each at 0% Oxygen ("O<sub>2</sub>"). TOTAL's current intention is to achieve this emission limit through the use of Low-NO<sub>x</sub> combustion promoters and NO<sub>x</sub>-reducing FCCU additives. For purposes of this Consent Decree only, NO<sub>x</sub> emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 60 ppmvd 7-day emissions limit, provided that during such periods TOTAL implements good air pollution control practices to minimize NO<sub>x</sub> emissions.

12. By no later than the Date of Entry, TOTAL shall use a NO<sub>x</sub> CEMS to monitor the performance of any FCCU and to report compliance with the terms and conditions of this Consent Decree. TOTAL shall make CEMS data available to EPA upon demand.

**B. Control of SO<sub>2</sub> Emissions from FCCU**

13. By no later than the Date of Entry of this Consent Decree, TOTAL shall limit SO<sub>2</sub> emissions from any FCCU at the Refinery to 25 ppmvd or less on a 365-day rolling average and 50 ppmvd or less on a 7-day rolling average, each at 0% O<sub>2</sub>. For purposes of this Consent Decree only, SO<sub>2</sub> emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 50 ppmvd 7-day emissions limit, provided that during such periods TOTAL implements good air pollution control practices to minimize SO<sub>2</sub> emissions.

14. By no later than the Date of Entry, TOTAL shall use an SO<sub>2</sub> CEMS to monitor the performance of any FCCU and to report compliance with the terms and conditions of this Consent Decree. TOTAL shall make CEMS data available to EPA upon demand.

**C. Control of PM Emissions from FCCU**

15. By no later than the Date of Entry of this Consent Decree, TOTAL shall limit PM emissions from any FCCU at the Refinery to 0.5 pounds PM or less per 1000 pounds coke burned on a 3-hour average basis.

16. TOTAL shall comply with 40 C.F.R. 60.105(a)(1) through the following alternative continuous parameter monitoring protocol: TOTAL shall continuously monitor and record (1) the pressure drop across the wet gas scrubber, and (2) the scrubber liquid to gas ratio. TOTAL shall report as an emission exceedance, in accordance with the requirements of 40 C.F.R. Part 60, Subpart J, and of this Consent Decree, any three-hour period in which the average venturi pressure differential falls below 16.60 in water (0.6 psig). Within six months after the Date of Entry of this Consent Decree, TOTAL shall conduct a stack test pursuant to the protocol specified in 40 C.F.R. 60.106(b)(2) to measure PM emissions if such stack test has not been conducted within one year prior to the Date of Lodging. Within nine months after the Date

of Entry of this Consent Decree, TOTAL shall submit a copy of the stack test result to EPA.

**D. Control of CO Emissions from FCCU**

17. By no later than the Date of Entry of this Consent Decree, TOTAL shall limit CO emissions from any FCCU at the Refinery to 500 ppmvd or less on a 1-hour average basis and 100 ppmvd or less on a 365-day rolling average basis, each at 0% O<sub>2</sub>. For purposes of this Consent Decree only, CO emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the 1-hour 500 ppmvd emissions limit, provided that during such periods TOTAL implements good air pollution control practices to minimize CO emissions.

18. By no later than the Date of Entry, TOTAL shall use a CO CEMS to monitor the performance of any FCCU and to report compliance with the terms and conditions of this Consent Decree. TOTAL shall make CEMS and process data available to EPA upon demand.

**E. NSPS Subparts A and J Applicability to FCCU Regenerator**

19. Effective on the Date of Entry of this Consent Decree, any FCCU Catalyst Regenerator at the Refinery shall be an "affected facility," as that term is used in 40 C.F.R. Part 60, Subparts A and J, and therefore subject to, and required to comply with, the requirements of 40 C.F.R. Part 60, Subparts A and J, for each relevant pollutant. For any FCCU Catalyst Regenerator that is or becomes an affected facility pursuant to this Paragraph, entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8.

**F. Control of NO<sub>x</sub> Emissions from Heaters and Boilers**

20. TOTAL shall install NO<sub>x</sub> control technology on, or otherwise limit NO<sub>x</sub> emissions from, the Covered Heaters and Boilers listed in Appendix A to this Consent Decree

("Existing Covered Heaters and Boilers") such that: (i) no later than December 31, 2009, the Refinery-wide weighted-average NOx emissions from all Existing Covered Heaters and Boilers is no greater than 0.052 lbs.-NOx/mmBtu ("the Interim Limit"); and (ii) no later than December 31, 2013, the Refinery-wide weighted-average NOx emissions from all Existing Covered Heaters and Boilers is no greater than 0.040 lbs.-NOx/mmBtu ("the Final Limit"). With respect to any newly-constructed Covered Heaters and Boilers added to the Refinery after the Date of Entry ("Future Covered Heaters and Boilers"), TOTAL shall not operate any Future Covered Heaters and Boilers without Next Generation Ultra-Low NOx Burners or Selective Catalytic Reduction, or an alternative NOx control technology that achieves an equal or greater level of control of NOx emissions as Next Generation Ultra-Low NOx Burners that EPA has approved explicitly based on information submitted by TOTAL to EPA, but in no case shall seeking to use an alternative technology extend any deadlines under this Consent Decree.

21. Appendix A to this Consent Decree contains an initial list of the Covered Heaters and Boilers. This initial inventory identifies previously constructed heaters and boilers at the Refinery and provides the following information concerning the Covered Heaters and Boilers:

- (i) TOTAL's designation for the heater or boiler;
- (ii) The heat input capacity and the source of such information ("heat input capacity"). For the purposes of this subparagraph, the heat input capacity for each Covered Heater or Boiler shall be the lesser of any applicable permit limitation or TOTAL's best then-current estimate of its maximum heat input capacity;
- (iii) All applicable NOx emission limits, in pounds per million BTU; and
- (iv) Whether a CEMS is installed and operating.

22. TOTAL shall submit to EPA an annual update to the initial inventory on or before March 31 of each calendar year beginning in 2008.

23. On or before December 31, 2007, TOTAL shall submit to EPA a compliance plan for attainment of both the Interim and Final Limits for refinery-wide weighted-average NOx emissions for all Existing Covered Heaters and Boilers. The compliance plan will reflect TOTAL's then-current strategy for satisfying the requirements of Paragraph 20. TOTAL shall not be bound by the terms in this compliance plan.

24. TOTAL shall demonstrate compliance with the refinery-wide weighted-average NOx emissions limits for all Existing Covered Heaters and Boilers by meeting the following inequalities:

a. For the Interim Limit:

$$0.052 \text{ lbs.-NO}_x/\text{MMBTU} \geq \sum_i^n (\text{ELR}_i \times \text{HIR}_i) / \sum_i^n \text{HIR}_i$$

Where:

$\text{ELR}_i$  = The relevant NOx emission limit for Existing Covered Heater or Boiler "i" in lbs.-NOx per Million BTU (HHV);

$\text{HIR}_i$  = Heat input capacity of Existing Covered Heater or Boiler "i" as reported in the latest annual update to the initial inventory; and

$n$  = Total number of Existing Covered Heaters and Boilers.

b. For the Final Limit:

$$0.040 \text{ lbs.-NO}_x/\text{MMBTU} \geq \sum_i^n (\text{ELR}_i \times \text{HIR}_i) / \sum_i^n \text{HIR}_i$$

Where:

$\text{ELR}_i$  = The relevant NOx emission limit for Existing Covered Heater or Boiler "i" in lbs.-NOx per Million BTU (HHV);

$\text{HIR}_i$  = Heat input capacity of Existing Covered Heater or Boiler "i" as reported in the latest annual update to the initial inventory; and

n = Total number of Existing Covered Heaters and Boilers.

25. Subject to Paragraph 26, within 180 days after the Date of Entry of this Consent Decree, TOTAL shall monitor each Covered Heater or Boiler as follows:

- (i) For a Covered Heater or Boiler with a Heat Input Capacity greater than 100 MMBTU/hr (HHV), TOTAL shall install or continue to operate a CEMS for NO<sub>x</sub>;
- (ii) For a Covered Heater or Boiler with a Heat Input Capacity of less than or equal to 100 MMBTU/hr (HHV), TOTAL shall conduct an initial performance test and any periodic tests that may be required by EPA or by the applicable State or local permitting authority under the applicable regulatory authority. TOTAL shall report the results of the initial performance testing to EPA. TOTAL shall use Method 7E or an EPA-approved alternative test method to conduct initial performance testing for NO<sub>x</sub> emissions required by this subparagraph.

26. Notwithstanding Paragraph 25, TOTAL shall monitor the following Existing Covered Heaters and Boilers as follows:

- (i) For the Existing Covered Heaters and Boilers designated in Appendix A as "ACU-2 Charge, H-201," "ACU-1 Charge, H-202A," "ACU-1 Charge, H-202B," and "Vacuum Charge, H-301," TOTAL shall conduct an initial performance test pursuant to Paragraph 25(ii) within 180 days of the Date of Entry and comply with the requirements of Paragraph 25(ii) thereafter, but by no later than December 31, 2011, TOTAL shall install a CEMS on

each such unit pursuant to Paragraph 25(i) and comply with Paragraph 25(i), instead, thereafter; and

- (ii) For the Existing Covered Heater designated in Appendix A as "Unibon Charge, 13H-1," TOTAL shall conduct an initial performance test pursuant to Paragraph 25(ii) within 180 days of the Date of Entry and comply with the requirements of Paragraph 25(ii) thereafter, but by no later than December 31, 2008, TOTAL shall install a CEMS on such unit pursuant to Paragraph 25(i) and comply with Paragraph 25(i), instead, thereafter.

27. With respect to each CEMS required by Paragraph 25, in lieu of the requirements of 40 C.F.R. Part 60, Appendix F §§ 5.1.1, 5.1.3, and 5.1.4, TOTAL must conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMS at least once every three years. TOTAL must also conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.

28. TOTAL shall install, certify, calibrate, maintain, and operate all CEMS required by this Consent Decree, including, but not limited to, the CEMS required by Paragraphs 12, 14, 18, and 25, in accordance with the requirements of 40 C.F.R. §§ 60.11, 60.13, and Part 60 Appendices A, B, and F. All CEMS required by this Consent Decree will be used to demonstrate compliance with emission limits, and shall be operated and data recorded pursuant to applicable law.

**G. Control of SO<sub>2</sub> Emissions from, and NSPS Applicability to, Heaters and Boilers**

29. Effective on the Date of Entry of this Consent Decree, all heaters and boilers at the Refinery shall be "affected facilities," as that term is used in 40 C.F.R. Part 60, Subparts A and J, and therefore subject to, and required to comply with, the requirements of 40 C.F.R. Part

60, Subparts A and J, for fuel gas combustion devices. For any heater or boiler that is or becomes an affected facility under NSPS Subpart J pursuant to this Paragraph, entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8.

30. No later than the Date of Entry of this Consent Decree, TOTAL shall not burn Fuel Oil in any combustion unit at the Refinery. This prohibition is not intended to limit, nor shall be interpreted as limiting, the use of torch oil in any FCCU regenerator to assist in starting, restarting, maintaining hot standby, or maintaining regenerator heat balance.

## **VI. NEW SOURCE PERFORMANCE STANDARDS ("NSPS") AND FLARING**

### **A. NSPS Applicability to the SRPs**

31. Effective on the Date of Entry of this Consent Decree, all Sulfur Recovery Plants at the Refinery shall be "affected facilities," as that term is used in 40 C.F.R. Part 60, Subparts A and J. Except as provided in Paragraph 32, all Sulfur Recovery Plants at the Refinery shall be subject to, and required to comply with, the requirements of 40 C.F.R. Part 60, Subparts A and J as of the Date of Entry, including, but not limited to, the requirement that TOTAL monitor all emissions points (stacks) to the atmosphere for tail gas emissions and monitor and report excess emissions from each SRP, as required by 40 C.F.R. §§ 60.7(c), 60.13, and 60.105(a)(5), (6) or (7). TOTAL shall monitor emissions from each SRP with CEMS at each emission point, unless an SO<sub>2</sub> alternative monitoring procedure has been approved by EPA, per 40 C.F.R. § 60.13(i), for any of the emission points. This continuous emissions monitoring requirement is not applicable to the Acid Gas Flaring Devices that could be used to flare Acid Gas or Sour Water Stripper Gas diverted from any SRP.

32. Between the Date of Entry of this Consent Decree and 48 months after the Date of Entry, TOTAL shall comply with 40 C.F.R. § 60.104(a)(2) at all times, except during the Startup, Shutdown, or Malfunction of an SRP or the Startup, Shutdown, or Malfunction of an associated TGU. By no later than 48 months after the Date of Entry of this Consent Decree, TOTAL shall comply with 40 C.F.R. § 60.104(a)(2) at all times, except during the Startup, Shutdown, or Malfunction of an SRP or the Malfunction of an associated TGU. TOTAL shall meet the requirements of the preceding sentence by either:

- (i) installing and operating an additional TGU that is capable of accepting the tail gas from any existing SRP as well as any new SRP; or
- (ii) otherwise complying with 40 C.F.R. § 60.104(a)(2) at its SRPs; provided however, that in no event shall TOTAL ever operate any SRP without the associated TGU except in the event of a Malfunction of the associated TGU.

33. Compliance with NSPS Operation and Maintenance Requirements and Sulfur Pit Emissions.

a. Beginning on the Date of Entry, at all times, including periods of Startup, Shutdown, or Malfunction, TOTAL will, to the extent practicable, operate and maintain all SRPs and associated air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions pursuant to 40 C.F.R. § 60.11(d).

b. TOTAL shall continue to route, or will route, all sulfur pit emissions at the Refinery so that they are eliminated, controlled, or included and monitored as part of a SRP's emissions subject to the NSPS Subpart J limit for SO<sub>2</sub> at 40 C.F.R. § 60.104(a)(2) by no later than either the first turnaround of the applicable Claus train that occurs on or after one year from

the Date of Entry, or by December 31, 2008, whichever first occurs.

34. For any SRP that is or becomes an affected facility pursuant to this Section, entry of this Consent Decree and compliance with the relevant monitoring requirements of this Consent Decree shall satisfy the notice requirements of 40 C.F.R. § 60.7(a) and the initial performance test requirement of 40 C.F.R. § 60.8.

**B. Good Operation and Maintenance**

35. By no later than 180 days from the Date of Entry of this Consent Decree, TOTAL shall submit to EPA a summary of the plans, implemented or to be implemented, at the Refinery for enhanced maintenance and operation of the Refinery's SRPs and TGUs, including any supplemental control devices, and the appropriate Upstream Process Units. This plan shall be termed a Preventive Maintenance and Operation Plan ("PMO Plan"). The PMO Plan shall be a compilation of TOTAL's approaches for exercising good air pollution control practices and for minimizing SO<sub>2</sub> emissions at the Refinery. The PMO Plan shall have as its goal the elimination of Acid Gas Flaring and the continuous operation of all SRPs, between Scheduled Maintenance turnarounds, with minimal emissions. The PMO Plan shall include, but not be limited to, sulfur shedding procedures, startup and shutdown procedures, emergency procedures, and schedules to coordinate maintenance turnarounds of all SRP Claus trains and associated TGUs to coincide, if necessary to minimize emissions, with scheduled turnarounds of major Upstream Process Units. TOTAL shall operate consistent with the PMO Plan at all times, including periods of Startup, Shutdown, and Malfunction of its SRPs. Changes to the PMO Plan related to minimizing Acid Gas Flaring and/or SO<sub>2</sub> emissions shall be summarized and reported by TOTAL to EPA on an annual basis.

36. In addition, TOTAL shall, along with the PMO Plan, provide a list, in chronological order, of each Acid Gas Flaring Incident or Tail Gas Incident that occurred at the

Refinery from January 1, 2002 through December 31, 2006. For each such Incident, the list required by this Paragraph shall include the date of the Incident, the Incident's duration, an estimate of the amount of SO<sub>2</sub> released during the Incident, and a brief description of the root cause of the Incident.

37. EPA does not, by its review of the PMO Plan and/or by its failure to comment on the PMO Plan, warrant or aver in any manner that any of the actions that TOTAL may take pursuant to the PMO Plan will result in compliance with the provisions of the Clean Air Act or any other applicable federal, state, or local law or regulation. Notwithstanding the review by EPA of a PMO Plan, TOTAL shall remain solely responsible for compliance with the Clean Air Act and such other laws and regulations.

**C. NSPS Applicability to Flaring Devices**

38. TOTAL operates the following Flaring Devices at the Refinery: North Flare, Middle Flare, South Flare. On the following dates, each Flaring Device shall be an "affected facility," as that term is used in 40 C.F.R. Part 60, Subparts A and J, and therefore subject to, and required to comply with, the requirements of 40 C.F.R. Part 60, Subparts A and J, for fuel gas combustion devices: (i) for the North Flare, the Date of Entry; and (ii) for the Middle and South Flares, 48 months following the Date of Entry; provided, however, that with respect to all Flaring Devices, as specified by Paragraph 41, beginning on the Date of Entry, TOTAL shall at all times and to the extent practicable, including during periods of Startup, Shutdown, or Malfunction, implement good air pollution control practices for minimizing emissions consistent with 40 C.F.R. § 60.11(d), and such practices may include, but not be limited to, protocols or other operating procedures suggested by EPA for minimizing emissions during planned Startups or Shutdowns.

39. Compliance Methods for Flaring Devices. For each Flaring Device, TOTAL will

use one or any combination of the following NSPS Subpart J compliance methods:

- (i) Operate and maintain a flare gas recovery system to control continuous or routine combustion in the Flaring Device. Use of a flare gas recovery system on a flare obviates the need to continuously monitor emissions as otherwise required by 40 C.F.R. § 60.105(a)(4);
- (ii) Operate the Flaring Device as a fuel gas combustion device and comply with NSPS monitoring requirements by use of a CEMS pursuant to 40 C.F.R. § 60.105(a)(4) or with a predictive monitoring system approved by EPA as an alternative monitoring system pursuant to 40 C.F.R. § 60.13(i);  
or
- (iii) Eliminate the routes of continuous or intermittent, routinely-generated refinery fuel gases to a Flaring Device and operate the Flaring Device such that it receives only process upset gases, fuel gas released as a result of relief valve leakage, or gases released due to other emergency malfunctions.

40. Compliance Certification for Flaring Devices. For each Flaring Device, by the dates indicated in Paragraph 38, TOTAL will submit to EPA a Compliance Certification for Flaring Devices that (i) certifies compliance with one or more of the compliance methods set forth in Paragraph 39, and (ii) identifies the compliance method(s) used.

41. Good Air Pollution Control Practices. Beginning on the Date of Entry, TOTAL shall at all times and to the extent practicable, including during periods of Startup, Shutdown, or Malfunction, implement good air pollution control practices for minimizing emissions consistent with 40 C.F.R. § 60.11(d).

42. Performance Tests. For each Flaring Device, by no later than 180 days after the dates indicated in Paragraph 38, TOTAL will conduct a flare performance test pursuant to 40 C.F.R. §§ 60.8 and 60.18, or an EPA-approved equivalent method, unless such performance test has previously been performed. In lieu of conducting the velocity test required in 40 C.F.R. § 60.18, TOTAL may submit velocity calculations that demonstrate that the Flaring Device meets the performance specification required by 40 C.F.R. § 60.18.

43. The combustion in a Flaring Device of process upset gases, as defined in 40 C.F.R. § 60.101(e), or fuel gas that is released to the Flaring Device as a result of relief valve leakage or other emergency malfunctions, is exempt from the requirement to comply with 40 C.F.R. § 60.104(a)(1).

**D. Investigation and Reporting**

44. Beginning on the Date of Entry of this Consent Decree, TOTAL shall submit a report to EPA within 45 days following the end of each AG Flaring Incident, Hydrocarbon Flaring Incident, or Tail Gas Incident at the Refinery. Such reports shall set forth the following information concerning the Incident (a “Root Cause Failure Analysis” or “RCFA”):

- (i) The date and time that the Incident started and ended. To the extent that the Incident involved multiple releases either within a 24-hour period or within subsequent, contiguous, non-overlapping 24-hour periods, TOTAL shall set forth the starting and ending dates and times of each release.
- (ii) An estimate of the quantity of SO<sub>2</sub> that was emitted and the calculations that were used to determine that quantity.
- (iii) The steps, if any, that TOTAL took to limit the duration and/or quantity of SO<sub>2</sub> emissions associated with the Incident.
- (iv) A detailed analysis that sets forth the Root Cause(s) of that Incident, to the extent

determinable.

- (v) An analysis of the measures, if any, that are reasonably available to reduce the likelihood of a recurrence of the Incident resulting from the same Root Cause(s) in the future. The analysis shall discuss the alternatives, if any, that are reasonably available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operational, and maintenance changes shall be evaluated.
- (vi) Either (1) a description of corrective action(s) pursuant to Section E of this Consent Decree and, if not already completed, a schedule for its (their) implementation, including proposed commencement and completion dates, or (2) an explanation that corrective action(s) is (are) not required.
- (vii) A statement that:
  - (a) specifically identifies all of the possible grounds for stipulated penalties under Section F of this Consent Decree and describes whether or not such Incident falls under any of those grounds;
  - (b) describes whether Paragraph 51 or 52 of this Consent Decree applies to the Incident and why, and, if Paragraph 52 applies, describes whether subparagraph a. or b. applies and why; and
  - (c) states whether or not TOTAL asserts a defense to such Incident, and if so, a description of such defense.
- (viii) To the extent that investigations of the causes and/or possible corrective actions still are underway on the due date of the report, a statement of the anticipated date by which a follow-up report fully conforming to the requirements of this

Paragraph will be submitted; provided, however, that if TOTAL has not submitted a report or a series of reports containing the information required to be submitted under this Paragraph within 45 days (or such additional time as EPA may allow) after the due date for the initial report for any Incident, the stipulated penalty provisions of Paragraph 57.b. shall apply for failure to timely submit the report. Nothing in this Paragraph shall be deemed to excuse TOTAL from its investigation, reporting, and corrective action obligations under this Part for any Incident which occurs after another Incident for which TOTAL requested an extension of time under this Paragraph; and

- (ix) To the extent that the implementation of a corrective action(s), if any, is not finalized at the time of the submission of the report required under this Paragraph, then, by no later than 30 days after completion of the implementation of the corrective action(s), TOTAL shall submit a report identifying the corrective action(s) taken and the dates of commencement and completion of implementation.

**E. Corrective Action**

45. In response to any Incident, TOTAL, as expeditiously as reasonably practicable, shall take such interim and/or long-term corrective actions, if any, as are reasonable and consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause of that Incident.

46. If EPA does not notify TOTAL in writing within 60 days of receipt of the report(s) required by Paragraph 44 that it objects to one or more aspects of TOTAL's proposed corrective action(s), if any, and schedule(s) of implementation, if any, then that (those) action(s) and schedule(s) shall be deemed acceptable for purposes of compliance with Paragraph 45 of this

Consent Decree, and Paragraph 133A.b. shall not apply.

47. EPA does not, by its agreement to the entry of this Consent Decree or by its failure to object to any corrective action that TOTAL may take in the future, warrant or aver in any manner that any of TOTAL's corrective actions in the future will result in compliance with the provisions of the Clean Air Act or its implementing regulations. Notwithstanding EPA's review of any plans, reports, corrective actions, or procedures under this Part, TOTAL shall remain solely responsible for non-compliance with the Clean Air Act and its implementing regulations. Nothing in this Part shall be construed as a waiver of EPA's rights under the Clean Air Act and its regulations in the event of future violations of the Act or its regulations by TOTAL.

48. If EPA does object, in whole or in part, to TOTAL's proposed corrective action(s) and/or its schedule(s) of implementation, or, where applicable, to the absence of such proposal(s) and/or schedule(s), it shall notify TOTAL of that fact within 60 days following receipt of the RCFA required by Paragraph 44. If EPA and TOTAL cannot agree on the appropriate corrective action(s), if any, to be taken in response to a particular Incident, either Party may invoke the Dispute Resolution provisions of Part XIX.

49. Specific Flaring Reduction Projects. In addition to the other requirements in this Part, TOTAL has implemented or shall implement the following specific projects to reduce Flaring Incidents at the Refinery as set forth in Appendix B:

- (i) Refinery Sour Gas Processing Project;
- (ii) Fuel Gas Recovery System Project;
- (iii) Compressor Reliability Project;
- (iv) Electrical Reliability Project;

- (v) Sulfur Recovery Plant Reliability Improvement Project;
- (vi) Critical Flaring Equipment Identification Project;
- (vii) Reliability Equipment Identification and Installation Project; and
- (viii) Sour Water Storage Capacity Project.

**F. Flaring Incidents and Stipulated Penalties**

50. The provisions of this Section shall apply to any Acid Gas Flaring, Tail Gas, or Hydrocarbon Flaring Incident at the Refinery.

51. The stipulated penalty provisions of Paragraph 57 shall apply to any Flaring Incident for which the Root Cause was one or more of the following acts, omissions, or events:

- (i) Error resulting from careless operation by the personnel charged with the responsibility for the SRP, TGU, or Upstream Process Units;
- (ii) Failure to follow written procedures;
- (iii) Failure of a part, equipment, or system that is due to a failure by TOTAL to operate and maintain that part, equipment, or system in a manner consistent with good engineering practice;
- (iv) Failure of both the C200 compressor and C200A back-up compressor;
- (v) Routine vent releases or releases of other continuous or intermittent, routinely-generated refinery fuel gas, unless such releases occur because of a failure of a fuel gas recovery system;
- (vi) For an Incident associated with the Sulfur Recovery Plant occurring after the implementation of all projects pursuant to the Sulfur Recovery Plant Reliability Improvement Project, any Root Cause identified by the Project;
- (vii) For an Incident occurring 6 months after a particular process unit is analyzed pursuant to the Critical Flaring Equipment Identification Project, any failure of

critical flaring equipment associated with such unit due to inadequate preventative maintenance or inspection;

- (viii) Failure of the wet gas compressor due to (1) inadequate systems to monitor the operation of the compressor, (2) vibration, or (3) electrical surges;
- (ix) Failure of the main air blower at the FCCU due to inadequate systems to monitor the operation of the blower;
- (x) Failure of the reformer hydrogen compressor due to electrical defects in the motor winding;
- (xi) For an Incident occurring after a particular process unit is analyzed pursuant to the Reliability Equipment Identification and Installation Project, failure of any Reliability Equipment (defined as any equipment with an anticipated service life less than the planned interval between turnarounds for the unit with which the equipment is associated, that could not be maintained, repaired, or replaced while the associated unit is operating, and the failure of which could cause a Flaring Incident) associated with such unit that is identified by the Project and for which TOTAL does not install a spare or make other modifications pursuant to the Project;
- (xii) For an Incident occurring after the Deep Conversion Project begins operation, any failure due to inadequate sour water storage capacity because of the added sour water from the Deep Conversion Project; and
- (xiii) For an incident occurring after the implementation of the Electrical Reliability Project, any failure due to (1) lightning strikes affecting the two electrical substations serving the Refinery, (2) inadequate power supply to the fuel gas

recovery compressors, and (3) dips or surges in the electric supply that are within the tolerance range of the restart devices on the 480-volt motors.

52. If the Flaring Incident is not a result of one of the root causes identified in Paragraph 51, then the stipulated penalty provisions of Paragraph 57 shall apply if the Incident:

a. Results in emissions of sulfur dioxide at a rate greater than 20 pounds per hour continuously for 3 consecutive hours or more and TOTAL failed to act consistent with the PMO Plan and/or to take any action during the Incident to limit the duration and/or quantity of SO<sub>2</sub> emissions associated with such incident; or

b. Causes the total number of Acid Gas Flaring Incidents in a rolling twelve (12) month period to exceed five (5), or causes the total number of Tail Gas Incidents in a rolling twelve (12) month period to exceed five (5), or causes the total number of Hydrocarbon Flaring Incidents in a rolling twelve (12) month period to exceed ten (10) for the first three (3) years following the Date of Entry of this Consent Decree or causes the total number of Hydrocarbon Flaring Incidents in a rolling twelve (12) month period to exceed five (5) thereafter. In the event that an Incident falls under both Paragraphs 51 and 52, then Paragraph 51 shall apply.

53. With respect to any Flaring Incident not identified in Paragraph 51 or 52, the following provisions shall apply:

a. Agreed Upon Malfunction: If the Root Cause of the Incident was sudden, infrequent, and not reasonably preventable through the exercise of good engineering practice, then that cause shall be designated as an agreed-upon malfunction for purposes of reviewing subsequent Incidents, and the stipulated penalty provisions of Paragraph 57 shall not apply.

b. First Time: If the Root Cause of the Incident was sudden and infrequent but reasonably preventable through the exercise of good engineering practices, then TOTAL shall

implement corrective action(s) pursuant to Section E and the stipulated penalty provisions of Paragraph 57 shall not apply.

c. Recurrence: If the Root Cause of the Incident was a recurrence of the same Root Cause that caused a previous Incident occurring after the Date of Entry of this Consent Decree, then the stipulated penalty provisions of Paragraph 57 shall apply unless either the Root Cause of the previous Incident was designated as an Agreed Upon Malfunction under Paragraph 53.a., or TOTAL was in the process of timely developing or implementing a corrective action plan pursuant to Section E for the previous Incident.

54. Defenses: TOTAL may raise the following affirmative defenses in response to a demand by the United States for stipulated penalties:

- (i) Force Majeure, pursuant to Part XVIII;
- (ii) As to Paragraph 51, the Incident does not meet the identified criteria;
- (iii) As to Paragraph 52, the Incident does not meet the identified criteria and/or was due to a Malfunction; or
- (iv) As to Paragraph 53, the Incident does not meet the identified criteria, was due to a Malfunction and/or TOTAL was in the process of timely developing or implementing a corrective action plan pursuant to Section E. In the event a dispute under Paragraph 52 or 53 is brought to the Court pursuant to the Dispute Resolution provisions of Part XIX, TOTAL may also assert a start up, shutdown, and/or upset defense, but the United States shall be entitled to assert that such defenses are not available. If TOTAL prevails in persuading the Court that the defenses of startup, shutdown, and/or upset are available for Incidents under 40 C.F.R. § 60.104(a)(1), TOTAL shall not be liable for stipulated penalties for

emissions resulting from such startup, shutdown, and/or upset. If the United States prevails in persuading the Court that the defenses of startup, shutdown, and/or upset are not available, TOTAL shall be liable for such stipulated penalties.

**G. Flaring Calculations**

55. Acid Gas and Hydrocarbon Flaring Calculations:

a. Calculation of the Quantity of SO<sub>2</sub> Emissions Resulting from AG or HC Flaring.

For purposes of this Consent Decree, the quantity of SO<sub>2</sub> emissions resulting from an AG or HC Flaring Incident shall be calculated by the following formula:

$$\text{Tons of SO}_2 = [\text{FR}][\text{TD}][\text{ConcH}_2\text{S}][8.31 \times 10^{-5}].$$

The quantity of SO<sub>2</sub> emitted shall be rounded to one decimal point. (Thus, for example, for a calculation that results in a number equal to 10.050 tons, the quantity of SO<sub>2</sub> emitted shall be rounded to 10.1 tons, and less than 10.050 shall be rounded to 10.0.) For purposes of determining the occurrence of, or the total quantity of SO<sub>2</sub> emissions resulting from, an AG or HC Flaring Incident that is comprised of intermittent flaring, the quantity of SO<sub>2</sub> emitted shall be equal to the sum of the quantities of SO<sub>2</sub> flared during each 24-hour period starting when gas was first flared.

b. Calculation of the Rate of SO<sub>2</sub> Emissions During AG or HC Flaring. For

purposes of this Consent Decree, the rate of SO<sub>2</sub> emissions resulting from an AG or HC Flaring Incident shall be expressed in terms of pounds per hour and shall be calculated by the following formula:

$$\text{ER} = [\text{FR}][\text{ConcH}_2\text{S}][0.166].$$

The emission rate shall be rounded to one decimal point, as described in Paragraph 55.a.

c. Meaning of Variables and Derivation of Multipliers Used in the Equations in this

Paragraph:

ER =	Emission Rate in pounds of SO <sub>2</sub> per hour
FR =	Average Flow Rate to Flaring Device(s) during Flaring Incident in standard cubic feet per hour
TD =	Total Duration of Flaring Incident in hours
ConcH <sub>2</sub> S =	Average Concentration of Hydrogen Sulfide in gas during Flaring Incident (or immediately prior to Flaring Incident if all gas is being flared) expressed as a volume fraction (scf H <sub>2</sub> S/scf gas)
$8.31 \times 10^{-5}$ =	$[\text{lb mole H}_2\text{S}/385 \text{ scf H}_2\text{S}][64 \text{ lbs SO}_2/\text{lb mole H}_2\text{S}][\text{Ton}/2000 \text{ lbs}]$
0.166 =	$[\text{lb mole H}_2\text{S}/385 \text{ scf H}_2\text{S}][1.0 \text{ lb mole SO}_2/1 \text{ lb mole H}_2\text{S}][64 \text{ lb SO}_2/1.0 \text{ lb mole SO}_2]$

Standard conditions: 68 deg. F, 14.7 lb.force/sq.in. absolute

The flow of gas to the Flaring Device(s) ("FR") shall be as measured by the relevant flow meter or reliable flow estimation parameters. Hydrogen sulfide concentration ("ConcH<sub>2</sub>S") shall be determined from the SRP feed gas analyzer, from knowledge of the sulfur content of the process gas being flared, by direct measurement by tutwiler or draeger tube analysis, or by any other method approved by EPA. In the event that any of these data points is unavailable or inaccurate, the missing data point(s) shall be estimated according to best engineering judgment. The report required under Paragraph 44 shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

56. Tail Gas Calculations. For the purposes of this Consent Decree, the quantity of SO<sub>2</sub> emissions resulting from a Tail Gas Incident shall be calculated by one of the following methods, based on the type of event:

a. If Tail Gas is combusted in a flare, the SO<sub>2</sub> emissions are calculated using the methods outlined in Paragraph 55; or

b. If Tail Gas exceeding the 250 ppmvd (NSPS J limit) is emitted from a monitored SRP incinerator, then the following formula applies to each 24 hour period of an incident beginning with the first hour that the rolling 12 hour average SO<sub>2</sub> concentration exceeds the 250 ppmvd NSPS Subpart J limit and ending with the 24 hour period in which the 250 ppmvd limit is last exceeded. Total SO<sub>2</sub> emissions during an incident are determined by summing the emissions during each 24 hour period of the incident.

$$ER_{TGI} = \sum_{i=1}^{H_{TGI}} [FR_{Inc.}]_i [Conc. SO_2 - 250]_i [0.166 \times 10^{-6}] [(20.9 - \% O_2)/20.9]_i$$

Where:

$ER_{TGI}$  = Excess Emissions from Tail Gas at the SRP incinerator, in SO<sub>2</sub> lbs. over a twenty-four (24) hour period

$H_{TGI}$  = Hours when the incinerator CEM was exceeding 250 ppmvd SO<sub>2</sub> adjusted to 0% O<sub>2</sub>, in each twenty-four (24) hour period of the Incident

$i$  = Each hour within  $H_{TGI}$

$FR_{Inc.}$  = Incinerator Exhaust Gas Flow Rate (standard cubic feet per hour, dry basis) (actual stack monitor data or engineering estimate based on the acid gas feed rate to the SRP) for each hour of the Incident

Conc. SO<sub>2</sub> = Actual concentration (CEM data) in the incinerator exhaust gas, ppmvd adjusted to 0% O<sub>2</sub> for each hour of the incident

% O<sub>2</sub> = O<sub>2</sub> concentration (CEMS data) in the incinerator exhaust gas in volume % on dry basis for each hour of the Incident

$$0.166 \times 10^{-6} = [lb \text{ mole of } SO_2 / 385 SO_2] [64 \text{ lbs } SO_2 / lb \text{ mole } SO_2] [1 \times 10^{-6}]$$

Standard conditions = 68 degree F; 14.7 lb<sub>force</sub>/sq.in. absolute

In the event the concentration SO<sub>2</sub> and/or the O<sub>2</sub> CEM hourly concentration data point are inaccurate or not available or a flow meter for  $FR_{Inc}$  does not exist or is inoperable, then TOTAL shall estimate emissions based on best engineering judgment.

## **H. Stipulated Penalties Under This Part**

57. TOTAL shall be liable for the following stipulated penalties for violations of the requirements of this Part. For each violation, the amounts identified below apply on the first day of violation, and are calculated for each incremental period of violation (or portion thereof):

a. For Acid Gas Flaring, Tail Gas, or Hydrocarbon Flaring Incidents for which

TOTAL is liable under this Part, an amount calculated as follows:

Tons Emitted in Flaring Incident	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is 3 hours or less	Length of Time from Commencement of Flaring within the Flaring Incident to Termination of Flaring within the Flaring Incident is greater than 3 hours but less than or equal to 24 hours	Length of Time of Flaring within the Flaring Incident is greater than 24 hours
5 Tons or less	\$500 per Ton	\$750 per Ton	\$1,000 per Ton
Greater than 5 Tons, but less than or equal to 15 Tons	\$1,200 per Ton	\$1,800 per Ton	\$2,300 per Ton, up to, but not exceeding, \$32,500 in any one day
Greater than 15 Tons	\$1,800 per Ton, up to, but not exceeding, \$32,500 in any one day	\$2,300 per Ton, up to, but not exceeding, \$32,500 in any one day	\$32,500 per day for each day over which the Flaring Incident lasts

For purposes of calculating stipulated penalties pursuant to this Paragraph, only one cell within the matrix shall apply. Thus, for example, for a Flaring Incident in which the Flaring starts at 1:00 p.m. and ends at 3:00 p.m., and for which 14.5 tons of sulfur dioxide are emitted, the penalty would be \$17,400 (14.5 x \$1,200); the penalty would not be \$13,900 [(5 x \$500) + (9.5 x \$1,200)]. For purposes of determining which column in the table set forth in this Paragraph applies under circumstances in which Flaring occurs intermittently during a Flaring Incident, the Flaring shall be deemed to commence at the time that the Flaring that triggers the initiation of a

Flaring Incident commences, and shall be deemed to terminate at the time of the termination of the last episode of Flaring within the Flaring Incident. Thus, for example, for Flaring within a Flaring Incident that (i) starts at 1:00 p.m. on Day 1 and ends at 1:30 p.m. on Day 1, (ii) recommences at 4:00 p.m. on Day 1 and ends at 4:30 p.m. on Day 1, (iii) recommences at 1:00 a.m. on Day 2 and ends at 1:30 a.m. on Day 2, and (iv) no further Flaring occurs within the Flaring Incident, the Flaring within the Flaring Incident shall be deemed to last 12.5 hours – not 1.5 hours – and the column for Flaring of “greater than 3 hours but less than or equal to 24 hours” shall apply.

b. For failure to timely submit any report required by this Part, or for submitting any report that does not substantially conform to its requirements, per report:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$750
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,500
Beyond 60 <sup>th</sup> day after deadline	\$3,000

c. For those corrective action(s) which TOTAL is required to undertake following Dispute Resolution, from the date EPA notifies TOTAL of EPA’s determination that corrective action, in addition to or distinct from any corrective action proposed by TOTAL, is required to respond to the Incident, reported under Paragraph 44 of this Consent Decree, until the earlier of the following dates: (i) the date that a final agreement is reached between EPA and TOTAL regarding the corrective action; or (ii) the date that a court order regarding the corrective action is entered:

\$5,000 per month

d. Failure to complete any corrective action pursuant to Section E of this Decree in

accordance with the schedule for such corrective action agreed to by TOTAL or imposed on TOTAL pursuant to the Dispute Resolution provisions of this Consent Decree (with any such extensions thereto as to which EPA and TOTAL may agree in writing):

\$5,000 per week

**I. Certification**

58. All notices, reports, or any other submissions required of TOTAL by this Part shall contain the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

59. Except as otherwise provided herein, the reporting requirements set forth in this Part do not relieve TOTAL of its obligation to any State, local authority, or EPA to submit any other reports or information required by the CAA, or by any other state, federal, or local requirements.

**J. Flare Gas Recovery Systems**

60. Periodic Maintenance of Flare Gas Recovery Systems. The Parties recognize that periodic maintenance may be required for properly designed and operated flare gas recovery systems. To the extent that TOTAL currently operates or will operate a flare gas recovery system, TOTAL will take all reasonable measures to minimize emissions while such periodic maintenance is being performed.

61. Safe Operation of Refining Processes. The parties recognize that under certain conditions, a flare gas recovery system may need to be bypassed in the event of an emergency or in order to ensure safe operation of refinery processes. Nothing in this Consent Decree precludes

TOTAL from temporarily bypassing a flare gas recovery system under such circumstances.

However, all provisions of this Part apply to any Flaring Incident resulting from such a bypass.

## **VII. BENZENE WASTE OPERATIONS NESHAP PROGRAM ENHANCEMENTS**

### **A. Compliance Status**

62. Beginning on the Date of Lodging of this Consent Decree, TOTAL shall comply with the compliance option set forth at 40 C.F.R. § 61.342(e) ("6 BQ Compliance Option"), along with all other applicable requirements of 40 C.F.R. Part 61, Subpart FF ("Benzene Waste Operations NESHAP" or "Subpart FF"). By no later than March 31, 2007, and continuing until March 31, 2013, TOTAL will meet a standard at least thirty percent more stringent than that imposed by 40 C.F.R. § 61.342(e). Specifically, TOTAL will operate the Refinery so that the Refinery benzene wastes described in § 61.342(e) are equal to or less than 4.2 Mg/year (4.62 tons/year) ("4.2 BQ Compliance Option").

63. TOTAL will not change the Refinery's compliance option from the 6 BQ Compliance Option, but after March 31, 2013, TOTAL no longer will be required to comply with the 4.2 BQ Compliance Option.

### **B. Verification of TAB and Subpart FF Compliance**

64. TOTAL has conducted an extensive review and verification of the Refinery's Total Annual Benzene ("TAB") calculation and an evaluation of all control equipment installed and operated pursuant to the requirements of Subpart FF. Based on this review and evaluation, TOTAL has submitted updated TABs and has identified additional projects to improve compliance with Subpart FF. By no later than one year after the Date of Entry of this Consent Decree, TOTAL shall certify compliance with Subpart FF and with Paragraph 62 of this Decree.

### **C. Carbon Canisters**

65. TOTAL shall continue to operate dual carbon canisters, in series, at all locations

within the Refinery where a carbon canister(s) is used as a control device under Subpart FF.

Beginning on the Date of Lodging of this Consent Decree, TOTAL will not use single carbon canisters for any new units or installations that require control pursuant to Subpart FF.

66. For TOTAL's dual carbon canister systems, "breakthrough" between the primary and secondary canister is defined as any reading equal to or greater than 50 ppm VOCs. Beginning on the Date of Entry of this Consent Decree, TOTAL shall monitor for breakthrough between the primary and secondary carbon canisters each Working Day.

67. TOTAL will replace the original primary carbon canisters with fresh carbon canisters immediately when breakthrough is detected. The original secondary carbon canister will become the new primary carbon canister and the fresh carbon canister will become the secondary canister. "Immediately" in this context means within 24 hours.

68. TOTAL shall maintain at the Refinery at all times a supply of fresh bulk carbon to ensure that the Refinery always has sufficient carbon on hand to recharge or replace carbon canisters in compliance with this Consent Decree.

69. TOTAL shall maintain records of compliance with the requirements of this Section in accordance with 40 C.F.R. § 61.356(j)(10).

**D. Annual Program**

70. By no later than the Date of Entry of this Consent Decree, TOTAL shall modify, as necessary, its written Subpart FF compliance procedures to provide for an annual review of reviews performed under the management of change process for the Refinery, including, but not limited to, construction projects, to ensure that all new benzene waste streams are included in the Refinery's waste stream inventory. TOTAL shall conduct such reviews on an annual basis.

**E. Laboratory Audits**

71. TOTAL shall conduct audits of all laboratories that perform analyses of TOTAL's Subpart FF samples to ensure that proper analytical and quality assurance/quality control procedures are followed for such samples.

72. By no later than 180 days after the Date of Entry of this Consent Decree, TOTAL shall complete an initial audit of each laboratory currently used to analyze Refinery benzene samples. Thereafter, TOTAL shall audit any new laboratory used to analyze Refinery benzene samples prior to the use of such laboratory. However, if TOTAL has completed an audit of any current or new laboratory within two years prior to the Date of Entry, initial audits of those laboratories pursuant to this Paragraph shall not be required.

73. TOTAL shall conduct subsequent laboratory audits such that each laboratory used to analyze Refinery benzene samples is audited once every two calendar years.

74. TOTAL may itself conduct the audits required under this Section, or retain third parties to conduct such audits, but the responsibility and obligation to ensure compliance with this Consent Decree and Subpart FF rest solely with TOTAL.

**F. Benzene Spills**

75. For each spill at the Refinery after the Date of Entry of this Consent Decree, TOTAL shall review the spill to determine if any benzene waste, as defined by Subpart FF, was generated. For each spill involving the release of more than 10 pounds of benzene in a 24-hour period, TOTAL shall: (i) include the benzene waste generated by the spill in the Refinery's TAB, as required by 40 C.F.R. § 61.342; and (ii) as appropriate, account for such benzene waste in accordance with the applicable compliance option.

**G. Training**

76. By no later than 90 days from the Date of Lodging of this Consent Decree, TOTAL shall develop and begin implementation of annual training for all employees asked to draw benzene waste samples for Subpart FF compliance. TOTAL shall complete the first year of such annual training by the end of the Calendar Year in which this Consent Decree is approved and signed by the Court.

77. By no later than 180 days from the Date of Lodging of this Consent Decree, TOTAL shall develop and implement standard operating procedures for all control equipment used to comply with the Benzene Waste Operations NESHAP. By no later than one year after the Date of Lodging, TOTAL shall complete an initial training program regarding these procedures for all operators assigned to such equipment. Comparable training also shall be provided to any persons who subsequently become operators of such control equipment prior to their assumption of this duty. Until termination of this Consent Decree, "refresher" training in these procedures shall be performed on a three-year cycle.

78. As part of TOTAL's training program, TOTAL must ensure that the employees of any contractors hired to draw benzene waste samples or to operate control equipment used to comply with the Benzene Waste Operations NESHAP are properly trained to undertake those operations at the Refinery.

**H. Waste/Slop/Off-Spec Oil Management**

79. By no later than 60 days after the Date of Entry of this Consent Decree, TOTAL shall submit to EPA schematics for the refinery that: (i) depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams; (ii) identify the control status of each such waste management unit; and (iii) show how such material is

transferred within the Refinery. Thereafter, representatives from TOTAL and EPA will confer about the appropriate characterization of each waste/slop/off-spec oil stream and the necessary controls, if any, for the waste management units handling such streams for purposes of the refinery's TAB calculation and compliance with Paragraph 62. If requested by EPA, TOTAL shall submit, by a mutually agreed upon date, revised schematics that reflect the Parties' agreements regarding the characterization of waste/slop/off-spec oil streams and the appropriate control standards. TOTAL shall use these schematics in preparing the BWON Sampling Plan required under Section I.

80. Non-Aqueous Benzene Waste Streams. All waste management units handling non-exempt, non-aqueous benzene wastes, as defined in Subpart FF, shall meet the applicable control standards of Subpart FF.

81. Aqueous Benzene Waste Streams. For purposes of calculating the Refinery's TAB pursuant to 40 C.F.R. § 61.342(a), Total must include all waste/slop/off-spec oil streams that become "aqueous" until such streams are recycled to a process or put into a process feed tank (unless the tank is used primarily for the storage of wastes). TOTAL shall make adjustments to such calculations as necessary to avoid double-counting or undercounting of benzene. For purposes of complying with the 4.2 BQ Compliance Option, all waste management units handling benzene waste streams must meet the applicable control standards of Subpart FF, or the uncontrolled benzene quantity in the waste streams handled by such units will count toward the benzene limit under the 4.2 BQ Compliance Option.

**I. End of Line Sampling**

82. By no later than 120 days after the Date of Entry of this Consent Decree, TOTAL shall submit to EPA for approval a sampling plan ("BWON Sampling Plan") designed to identify

the quantity of benzene generated each Calendar Quarter in uncontrolled benzene waste streams, including waste/slop/off-spec oil streams. The BWON Sampling Plan shall include, but not be limited to: (i) proposed sampling locations and methods for calculating flow at the "end of line" of uncontrolled benzene waste streams; (ii) a simplified flow diagram that identifies significant, uncontrolled benzene waste streams that feed into each proposed sampling location; (iii) proposed quarterly sampling, at the "point of waste generation," of each waste stream that contributes 0.05 Mg/year or more to the Refinery's uncontrolled benzene quantity; and (iv) proposed quarterly sampling at the "end of line" of all uncontrolled benzene waste streams. The BWON Sampling Plan may identify commingled, exempt waste streams for sampling, provided that TOTAL demonstrates that the benzene quantity of those commingled streams will not be underestimated.

83. TOTAL shall commence sampling under its BWON Sampling Plan not later than the first full Calendar Quarter following submittal of the Plan, regardless of whether or not the Plan is approved at that time, and shall conduct sampling under the Plan each Calendar Quarter thereafter. TOTAL shall take, and have analyzed, at least three representative samples from each identified sampling location. TOTAL shall use the average of all samples taken and the identified flow calculations to determine the Refinery's quarterly benzene quantity in uncontrolled waste streams and to estimate an annual value for the Refinery, pursuant to Paragraph 85. TOTAL may sample more frequently than required by this Section, but such sampling must be representative, end of line sampling in conformance with the requirements of this Section, and TOTAL must include the results of such sampling in calculating the average quarterly, end of line benzene quantity.

84. If changes in processes, operations, or other factors lead TOTAL to conclude that

its approved BWON Sampling Plan may no longer provide an accurate measure of the Refinery's quarterly benzene quantity in uncontrolled benzene waste streams, TOTAL shall submit a revised BWON Sampling Plan to EPA for approval.

85. At the end of each Calendar Quarter following commencement of quarterly sampling pursuant to the BWON Sampling Plan, TOTAL shall calculate a quarterly uncontrolled benzene quantity and shall estimate a projected annual uncontrolled benzene quantity based on the quarterly end of line sampling results, non-end of line sampling results, and the approved flow calculations. TOTAL shall submit the uncontrolled benzene quantity and, if applicable, TAB calculations in the reports due under Part XIII.

**J. Corrective Actions**

86. If any calculation performed pursuant to Paragraph 85 indicates that the quarterly uncontrolled benzene quantity exceeds 1.05 Megagrams or the projected annual uncontrolled benzene quantity exceeds 4.2 Megagrams, TOTAL shall submit a written report to EPA that evaluates all relevant information and identifies whether any action should be taken to reduce benzene quantities in the Refinery's waste streams for the remainder of the applicable calendar year. If additional actions are determined to be necessary to ensure compliance with the 4.2 BQ Compliance Option, TOTAL will include in its written report a BWON Corrective Measures Plan as specified in Paragraph 87.

87. BWON Corrective Measures Plan. TOTAL shall, in any BWON Corrective Measures Plan required by this Section, identify: (i) the cause of the potentially elevated benzene quantities; (ii) all corrective actions that TOTAL has taken or plans to take to ensure that the cause will not recur; and (iii) a specific strategy and schedule that TOTAL shall implement to ensure that TOTAL complies with the 4.2 BQ Compliance Option. TOTAL shall

submit the BWON Corrective Measures Plan, along with the report required under Paragraph 86, by no later than 60 days after the end of the Calendar Quarter for which the Plan and report are required. TOTAL shall implement its BWON Corrective Measures Plan in accordance with the schedule provided therein.

88. Third-Party TAB Study and Compliance Review. If in two consecutive Calendar Quarters any calculation performed pursuant to Paragraph 85 indicates that the quarterly uncontrolled benzene quantity exceeds 1.05 Megagrams or the projected annual uncontrolled benzene quantity exceeds 4.2 Megagrams and TOTAL is not able to identify the cause(s) and/or appropriate corrective measures to ensure compliance with the 4.2 BQ Compliance Option, TOTAL shall retain a third-party contractor to undertake a comprehensive TAB study and compliance review ("Third-Party TAB Study and Compliance Review") at the Refinery. By no later than 90 days following the end of the second consecutive Calendar Quarter in which the calculation performed pursuant to Paragraph 85 indicates that the quarterly uncontrolled benzene quantity exceeds 1.05 Megagrams or the projected annual uncontrolled benzene quantity exceeds 4.2 Megagrams, TOTAL shall submit a proposal to EPA that identifies the contractor, the contractor's scope of work, and the contractor's schedule for the Third-Party TAB Study and Compliance Review. Unless EPA disapproves or seeks modifications of the proposal within 30 days after its receipt, TOTAL shall authorize the contractor to commence work, and Paragraph 133A.b. shall not apply. TOTAL shall ensure that the work is completed in accordance with the schedule in the Study. No later than 30 days after TOTAL receives the results of the Third-Party TAB Study and Compliance Review, TOTAL shall submit the results to EPA, and TOTAL and EPA shall discuss such results informally. No later than 90 days after TOTAL receives the results of the Third-Party TAB Study and Compliance Review, or at such other time as TOTAL

and EPA agree, TOTAL shall submit to EPA a plan and schedule for remedying any deficiencies identified in the Third-Party TAB Study and Compliance Review and/or by EPA following the Study. Unless EPA disapproves or seeks modifications of the proposal within 30 days after its receipt, TOTAL shall implement the remedial plan in accordance with the schedule included therein, and Paragraph 133A.b. shall not apply.

**K. Miscellaneous Measures**

89. TOTAL shall manage all groundwater remediation conveyance systems at the Refinery in accordance with Subpart FF.

90. TOTAL shall, beginning on the Date of Lodging of this Consent Decree and continuing thereafter, do the following:

- (i) Conduct monthly visual inspections of all water traps within the Refinery's individual drain systems.
- (ii) Identify and mark all area drains that are segregated storm water drains.
- (iii) Conduct weekly visual inspections of all conservation vents or indicators on process sewers for detectable leaks, reset any vents where leaks are detected, and record the results of such weekly inspections. After two years of weekly inspections, and based upon an evaluation of the recorded results, TOTAL may submit a request to EPA to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent to TOTAL's request. Nothing in this Paragraph shall require TOTAL to monitor conservation vents on fixed roof tanks.
- (iv) Conduct quarterly monitoring of the Benzene NESHAP Pretreatment Unit API Separators (67S-301A and 67S-301B) in accordance with the "no detectable

emissions" provision in 40 C.F.R. § 61.347.

**L. Additional Benzene Waste Operations NESHAP Measures**

91. Installation of Sealing Boots Over Adjustable Leg Roof Penetrations in Refinery Tanks. TOTAL shall install and maintain boot sealing devices over each adjustable roof leg penetration on each tank listed in Appendix C. The tank boot sealing devices shall cover the upper ends of the tank legs and seal to the tank leg roof collar. The devices shall be constructed of polyester fabric with a urethane film or similar materials to provide a suitable barrier to VOC loss through the material. TOTAL shall complete installation of these devices: (i) on at least one-quarter of the tanks listed in Appendix C by February 28, 2007; ii) on at least one-half of such tanks by May 31, 2007; iii) on at least three-quarters of such tanks by August 31, 2007; and iv) on all such tanks by November 30, 2007.

92. Installation of Internal Floating Roofs. By June 30, 2007, TOTAL shall remove Tanks #597 and #598 from service and not return them to service until TOTAL installs internal floating roofs on the tanks. Each tank has a capacity of about 3,120 barrels and presently is used to hold xylene. At a minimum, each internal floating roof must conform to the requirements of Appendix H of American Petroleum Institute Standard 650.

93. Subpart QQQ Compliance. Within 90 days of the Date of Entry of this Consent Decree, TOTAL shall submit to the United States a complete list of each item that must to be brought into compliance with Title 40 C.F.R. Part 60, Subpart QQQ ("Subpart QQQ"), per Texas Permit No. 56385, ("Subpart QQQ Compliance Items"). Within one year of the Date of Entry, TOTAL must bring at least one-third of the Subpart QQQ Compliance Items into compliance with Subpart QQQ, identify which Items are brought into compliance, and certify such compliance. Within 18 months of the Date of Entry, TOTAL must bring at least two-thirds of

the Subpart QQQ Compliance Items into compliance with Subpart QQQ, identify which Items are brought into compliance, and certify such compliance. Within two years of the Date of Entry, TOTAL must bring all of the Subpart QQQ Compliance Items into compliance with Subpart QQQ, identify which Items are brought into compliance, and certify such compliance.

**M. Recordkeeping and Reporting Requirements for this Part**

94. Reports in addition to those required under 40 C.F.R. § 61.357. At the times specified in the applicable provisions of this Part, TOTAL shall submit the following to EPA:

- (i) Compliance certification, pursuant to Paragraph 64;
- (ii) Schematics of waste/slop/off-spec oil movements, pursuant to Paragraph 79;
- (iii) Implementation schedule for controls on waste management units handling organic benzene waste, if necessary, pursuant to Paragraph 79;
- (iv) BWON Sampling Plan, pursuant to Paragraph 82;
- (v) BWON Corrective Measures Plan to ensure that uncontrolled benzene does not equal or exceed 4.20 Mg/yr., if necessary, pursuant to Paragraph 87;
- (vi) Proposal for a Third-Party TAB Study and Compliance Review, if necessary, pursuant to Paragraph 88;
- (vii) Third-Party TAB Study and Compliance Review results, if necessary, pursuant to Paragraph 88; and
- (viii) Plan to implement the results of the Third-Party TAB Study and Compliance Review, if necessary, pursuant to Paragraph 88.

95. Reports in Conjunction with the Reports Required under 40 C.F.R. §61.357.

TOTAL shall include the following information in the quarterly reports required pursuant to 40 C.F.R. §§ 61.357(d)(6) and (7) ("Section 61.357 Reports"):

a. Laboratory Audits. Beginning with the first Section 61.357 Report due after the Date of Entry of this Consent Decree and continuing with every Section 61.357 Report thereafter, TOTAL shall identify all laboratory audits that TOTAL completed pursuant to Section E in the Calendar Quarter for which the Section 61.357 Report is due. TOTAL shall include, at a minimum, the identification of each laboratory audited, a description of the methods used in the audit, and the results of the audit.

b. Training. In the first Section 61.357 Report due after the Date of Entry, TOTAL shall describe the measures taken to comply with the training provisions of Section G, starting from the Date of Lodging and continuing through the last day of the Calendar Quarter for which the first Section 61.357 Report is due. In each subsequent Section 61.357 Report, TOTAL shall describe the measures taken to comply with the training provisions of Section G during the Calendar Quarter for which the Section 61.357 Report is due.

c. BWON Sampling Results. Once TOTAL begins sampling pursuant to the BWON Sampling Plan required under Section I, TOTAL shall include in each Section 61.357 Report submitted thereafter the results of all sampling undertaken pursuant to the Plan in the Calendar Quarter for which the Section 61.357 Report is due. The Section 61.357 Report shall include a list of all waste streams sampled, the results of the benzene analysis for each sample, and the computation of the end of line benzene quantity for the Calendar Quarter for which the Section 61.357 Report is due.

## **VIII. LEAK DETECTION AND REPAIR ("LDAR") PROGRAM**

### **A. Introduction**

96. In order to minimize or eliminate fugitive emissions of volatile organic compounds ("VOCs"), benzene, volatile hazardous air pollutants ("VHAPs"), and organic hazardous air pollutants ("HAPs") from valves and pumps in light liquid and/or in gas/vapor

service, TOTAL shall implement the measures required by this Part to enhance the Refinery's LDAR program under 40 C.F.R. Part 60, Subpart GGG, Part 61, Subparts J and V, Part 63, Subparts F, H, and CC, and applicable state LDAR requirements. The terms "in light liquid service" and "in gas/vapor service" shall have the definitions set forth in the applicable provisions of 40 C.F.R. Part 60, Subpart GGG, Part 61, Subparts J and V, Part 63, Subparts F, H and CC, and applicable state LDAR regulations. For purposes of this Part, the term "Equipment" shall mean valves and pumps in light liquid and/or in gas/vapor service, except for those pumps and valves exempt from standard monitoring frequencies under applicable LDAR Regulations.

**B. Written Refinery-Wide LDAR Program**

97. By the Date of Entry of this Consent Decree, TOTAL shall develop for the Refinery a written description of a Refinery-wide program designed to achieve and maintain compliance with all applicable federal and state LDAR regulations, as well as all requirements imposed by this Part. TOTAL shall update the Refinery's program description as necessary to ensure continuing compliance. By the Date of Entry, TOTAL shall submit copies of its enhanced LDAR program description to EPA, and shall maintain at the Refinery an updated version of the Refinery's program description. Until the Date of Termination, TOTAL shall use the enhanced LDAR program descriptions prepared pursuant to this Paragraph to implement an enhanced LDAR program at the Refinery, as required by this Part. The Refinery's program description shall include, at a minimum:

- (i) A set of refinery-specific leak rate goals that will be a target for achievement on a process-unit-by-process-unit basis (for purposes of this provision, the refinery-wide leak rate goal shall constitute a tool for implementation of the refinery-wide program, but shall not be enforceable or subject to stipulated penalties);
- (ii) An identification of all Equipment in light liquid and/or gas/vapor service that has

the potential to leak VOCs, HAPs, VHAPs, or benzene within process units that are owned and maintained at the Refinery;

- (iii) Procedures for identifying leaking Equipment within process units that are owned and maintained at the Refinery;
- (iv) Procedures for repairing and keeping track of leaking Equipment;
- (v) Procedures for identifying and including in the LDAR program new Equipment;
- (vi) A process for evaluating new and replacement Equipment to promote consideration and installation of Equipment that will minimize leaks and/or eliminate chronic leakers;
- (vii) A designation of the "LDAR Personnel" and the "LDAR Coordinator" who are responsible for implementing the enhanced LDAR program at the Refinery; and
- (viii) Procedures designed to ensure that components subject to LDAR requirements that are added to the Refinery during scheduled maintenance and construction activities are integrated into the enhanced LDAR program.

**C. Training**

98. By no later than one year from the Date of Entry of this Consent Decree, TOTAL shall implement a training program at the Refinery that includes the following features:

- (i) Any person assigned LDAR program responsibilities at the Refinery shall be given initial LDAR training before performing any LDAR work;
- (ii) Any Refinery employee assigned LDAR responsibilities as a primary job function (such as monitoring technicians, database users, QA/QC personnel, and the LDAR Coordinator) shall be given annual LDAR training (on an initial and recurrent basis);
- (iii) All other Refinery operations and maintenance personnel shall be given annual

training (on an initial and recurrent basis) on aspects of LDAR that are relevant to each person's duties; and

- (iv) Contract employees who perform LDAR work at the Refinery shall be given annual training (on an initial and recurrent basis) either by TOTAL or by the contractor.

**D. LDAR Audits**

99. Initial Compliance Audit. By 180 days after the Date of Entry of this Consent Decree, a third-party contractor retained by TOTAL shall complete a refinery-wide initial audit of TOTAL's compliance with all applicable LDAR requirements at the Refinery ("Initial Compliance Audit"), which shall include, at a minimum: (i) performing comparative monitoring of Equipment; (ii) reviewing records to ensure that monitoring and repairs of Equipment have been completed in the required timeframes; (iii) reviewing component identification procedures and data management procedures; (iv) observing LDAR technicians' calibration and monitoring techniques; and (v) an applicability review for regulations potentially applicable to Refinery process units. Within 30 days after completing the Initial Compliance Audit, TOTAL shall submit to EPA an Initial Compliance Audit Report which shall describe the results of the audit, disclose all areas of identified non-compliance, identify all steps taken to remedy the identified non-compliance, and certify TOTAL's full compliance with all applicable LDAR requirements as of the date of the Report.

100. Reserved.

101. Periodic Third-Party Audits. To ensure the Refinery's continued compliance with all applicable LDAR requirements, TOTAL shall retain a contractor(s) to perform a third-party audit of the Refinery's LDAR program at least once every two years. The first third-party audit shall take place no later than two years following the Date of Entry of this Consent Decree. Each

third-party audit shall include, at a minimum: (i) performing comparative monitoring of Equipment; (ii) reviewing records to ensure that monitoring and repairs of Equipment have been completed in the required timeframes; (iii) reviewing component identification procedures and data management procedures; and (iv) observing LDAR technicians' calibration and monitoring techniques. For each audit conducted pursuant to this Paragraph, TOTAL shall require the auditors to prepare a written audit report describing the audit's scope and findings.

**E. Actions Necessary to Correct Noncompliance**

102. If the results of any of the audits conducted pursuant to Section D identify any areas of noncompliance, TOTAL shall implement, as soon as practicable, all steps necessary to correct the area(s) of noncompliance and to prevent, to the extent practicable, a recurrence of the cause of the noncompliance. Until the Date of Termination, TOTAL shall retain the audit reports for all audits conducted pursuant to Paragraph 101 and shall maintain a written record of the corrective actions that TOTAL takes at the Refinery in response to any deficiencies identified in any audits. In the quarterly report submitted pursuant to the provisions of Part XIII for the first Calendar Quarter of each year, TOTAL shall submit the audit reports and corrective action records for audits performed and actions taken during the previous year.

**F. Internal Leak Definition for Valves and Pumps**

103. By no later than two years after the Date of Entry of this Consent Decree, TOTAL shall use the following internal leak definitions for Equipment subject to this Part, unless other permit(s), regulations, or laws require the use of lower leak definitions:

a. Leak Definition for Valves. TOTAL shall use an internal leak definition of 500 ppm VOCs for Refinery valves qualifying as Equipment, excluding pressure relief devices.

b. Leak Definition for Pumps. TOTAL shall use an internal leak definition of 2,000 ppm for Refinery pumps qualifying as Equipment.

**G. Reporting, Recording, Tracking, Repairing, and Remonitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions**

104. Reporting. For regulatory reporting purposes, TOTAL may continue to report leak rates in valves and pumps using the applicable regulatory leak definition, or may use the lower, internal leak definitions specified in Section F.

105. Recording, Tracking, Repairing, and Remonitoring Leaks. TOTAL shall record, track, repair, and remonitor all leaks above the internal leak definitions specified in Section F after such time as those definitions become applicable. For any component leaking above the applicable regulatory leak rate, TOTAL shall repair and remonitor the component or place the component on a “delay of repair” list as required by the applicable regulations and Section N. For any component leaking above the internal leak definitions specified by Section F but below the applicable regulatory leak rate, TOTAL shall make an initial attempt at repair and remonitor the component within five days, and shall complete repairs and remonitor the component or place the component on a “delay of repair” list according to Section N within 30 days.

**H. LDAR Monitoring Frequency**

106. Pumps. By no later than the effective date of the internal leak definitions under Section F, TOTAL shall monitor pumps qualifying as Equipment using the lower leak definition established by Section F on a monthly basis, unless more frequent monitoring is required by a federal, state, or local regulation.

107. Valves. By no later than the effective date of the internal leak definitions under Section F, TOTAL shall monitor valves qualifying as Equipment using the lower leak definition established by Section F on a quarterly basis, unless more frequent monitoring is required by a federal, state, or local regulation.

**I. First Attempt at Repairs on Valves**

108. Commencing no later than 90 days after the Date of Entry of this Consent Decree, TOTAL shall make a "first attempt at repair" within five days on any valve qualifying as Equipment that has a reading greater than 200 ppm VOCs and that LDAR personnel are authorized to repair, with no ability to skip periods on a process-unit-by-process-unit basis. TOTAL or its designated contractor shall remonitor all valves no later than the next Working Day after the "first attempt at repair." If the re-monitored leak reading is greater than the applicable leak definition, TOTAL may delay further repairs up to 15 days after initial identification in order to assess the persistence of the leak by re-monitoring again. If the re-monitored leak reading is below the applicable leak definition, no further action will be necessary. If the re-monitored leak reading is greater than the applicable leak definition, TOTAL shall repair the valve according to the requirements of Paragraph 105, except that no first repair attempt requirement shall apply.

**J. Electronic Monitoring, Storing, and Reporting of LDAR Data**

109. Electronic Storing and Reporting of LDAR Data. TOTAL will develop or continue to maintain an electronic database for storing and reporting LDAR data at the Refinery.

110. Electronic Data Collection During LDAR Monitoring and Transfer Thereafter. Beginning on the Date of Entry of this Consent Decree, TOTAL shall make maximum possible use of dataloggers and/or other electronic data collection devices for all data collection during all LDAR monitoring. TOTAL shall ensure that the responsible TOTAL employees or contractor personnel shall transfer, on a daily basis, electronic data from electronic datalogging devices to the electronic database required by Paragraph 109. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include an accurate time and date stamp for each monitoring event, the monitoring reading, and identifying

information on the operator and the instrument used in the monitored event. TOTAL may use paper logs where necessary or more feasible (e.g., small rounds, remonitoring, or when dataloggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, daily start and end times for the monitoring conducted, each monitoring reading, and the identification of the monitoring equipment. TOTAL shall transfer any manually recorded monitoring data to the electronic database required by Paragraph 109 within seven days of monitoring.

**K. QA/QC of LDAR Data**

111. By no later than 120 days after the Date of Entry of this Consent Decree, TOTAL, or a third-party contractor retained by TOTAL, shall develop and implement a procedure at the Refinery to ensure a quality assurance/quality control ("QA/QC") review of all data generated by LDAR monitoring technicians.

112. TOTAL shall ensure that monitoring data provided to TOTAL by its contractors is reviewed for QA/QC before the contractor submits the data to TOTAL.

113. At least once per Calendar Quarter, TOTAL shall perform QA/QC of any contractor's monitoring data which shall include, but not be limited to, number of components monitored per technician, time between monitoring events, and abnormal data patterns.

114. TOTAL shall implement a system for daily reporting of monitored activity and for periodically reviewing the daily results by appropriate operating supervisors.

**L. LDAR Personnel**

115. By no later than 180 days after the Date of Entry of this Consent Decree, TOTAL shall establish a program that will hold LDAR personnel accountable for LDAR performance. TOTAL shall establish and maintain an LDAR Coordinator position within the Refinery with responsibility for LDAR management and with the authority to implement improvements.

**M. Calibration/Calibration Drift Assessment**

116. Calibration. Beginning on the Date of Entry of this Consent Decree, TOTAL shall conduct all calibrations of LDAR monitoring equipment at the Refinery in accordance with 40 C.F.R. Part 60, EPA Reference Test Method 21.

117. Calibration Drift Assessment. Beginning on the Date of Entry of this Consent Decree, TOTAL shall conduct calibration drift assessments of LDAR monitoring equipment, at a minimum, at the end of each monitoring shift. TOTAL shall conduct the calibration drift assessment using, at a minimum, a calibration gas corresponding to the applicable leak threshold. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, TOTAL shall remonitor all valves that were monitored since the last calibration that had a reading greater than 100 ppm and shall remonitor all pumps that were monitored since the last calibration that had a reading greater than 500 ppm.

118. TOTAL shall maintain records of all instrument calibrations for a period of one year after performing the calibrations.

**N. Delay of Repair and Required Repairs**

119. Within 30 days of submitting the enhanced LDAR program description pursuant to Section B, TOTAL shall comply with the provisions of this Section at the Refinery.

120. Delay of Repair. For any Equipment that TOTAL is allowed under the applicable regulations to place on the "delay of repair" list for repair, TOTAL shall:

- (i) Require sign-off by the appropriate operating supervisor (which position will be identified in the Refinery's written enhanced LDAR program description) that the valve or pump is eligible for inclusion on the "delay of repair" list; and
- (ii) Include any valve or pump that is placed on the "delay of repair" list in TOTAL's regular LDAR monitoring.

121. Required Repairs on Leaking Valves:

a. Within 30 days of implementing the enhanced LDAR program, for valves qualifying as Equipment, other than control valves and pressure relief valves, leaking at a rate of 10,000 ppm or greater and which cannot be repaired using traditional techniques, TOTAL shall use the “drill and tap” or similarly effective method to repair the leaking valve, rather than placing the valve on the “delay of repair” list, unless TOTAL can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in such a manner. If not repaired within 15 days by other means, TOTAL shall make the first “drill and tap” or similarly effective repair attempt within 15 days after the leak was identified, and shall have 45 days after the leak was identified to complete the repair attempts.

b. After two unsuccessful attempts to repair a leaking valve through the “drill and tap” or similarly effective repair method, TOTAL may place the leaking valve on its “delay of repair” list. In its next progress report pursuant to Part XIII, TOTAL shall inform EPA of any similarly effective repair methods (alternate repair methods to “drill and tap”) used to comply with this Paragraph.

**O. Chronic Leaker Program**

122. TOTAL shall replace, repack, or perform similarly effective repairs on all “chronic leaker” non-control valves during the next process unit turnaround. A component shall be classified as a “chronic leaker” under this Paragraph if it leaks above 5,000 ppm twice in any consecutive four Calendar Quarters, unless the component has not leaked in the six consecutive Calendar Quarters prior to the relevant process unit turnaround.

**P. Recordkeeping and Reporting Requirements for this Part**

123. Outside of the reports required under 40 C.F.R. § 63.654 and Part XIII of this Consent Decree, no later than 30 days after completing the written refinery-wide enhanced

LDAR program description pursuant to Section B, TOTAL shall submit a copy of the program description to EPA and any other relevant state or local regulatory agency.

124. Consistent with the requirements of Part XIII, in the later of (1) the first progress report due under this Consent Decree, or (2) the first progress report after which the requirement becomes due, TOTAL shall include the following:

- (i) A certification of the implementation of the “first attempt at repair” program pursuant to Section I;
- (ii) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians pursuant to Section K;
- (iii) An identification of the LDAR Coordinator responsible for LDAR performance pursuant to Section L;
- (iv) A certification of the implementation of the calibration drift assessment procedures pursuant to Section M;
- (v) A certification of the implementation of the “delay of repair” procedures pursuant to Section N; and
- (vi) A certification of the implementation of the internal leak definition and monitoring frequency procedures pursuant to Sections F and H.

125. Semiannual reports due under 40 C.F.R. § 63.654. In the first semiannual report for each calendar year required under 40 C.F.R. § 63.654, TOTAL shall identify each audit that was conducted pursuant to the requirements of Section D in the previous year, including an identification of the auditors, a summary of the audit results, and a summary of the actions that TOTAL took or intends to take to correct all deficiencies identified in the audits. In each semiannual report due under 40 C.F.R. § 63.654, TOTAL shall include:

a. Training. Information identifying the measures that TOTAL took to comply with the provisions of Section C; and

b. Monitoring. The following information on LDAR monitoring: (i) a list of the process units monitored during the quarter; (ii) the number of valves and pumps monitored in each process unit; (iii) the number of valves and pumps found leaking; (iv) the number of components not fixed within 15 days or placed on the delay of repair list; (v) the number of first repair attempts not completed within five days; (vi) the number of first attempts not performed within five days pursuant to Section I; (vii) the number of “difficult to monitor” pieces of Equipment monitored; (viii) the number of all chronic leakers not repaired during the prior turnaround; (ix) a list of all Equipment currently on the “delay of repair” list and the date each component was placed on the list; and (x) the number of repair attempts not completed according to the timeframes in Section N.

## **IX. PERMITTING**

126. Obtaining Permit Limits for Consent Decree Emission Limits That Are Effective Upon Date of Entry. Except as set forth below, by no later than 180 days after the Date of Entry, TOTAL shall submit applications to the relevant permitting authority to incorporate the emission limits and standards required by this Consent Decree that are effective as of the Date of Entry into federally enforceable minor or major new source review permits or other permits (other than Title V permits) that are federally enforceable. If another application for a permit or permit modification is due for the same emissions unit within 365 days of the Date of Entry, TOTAL shall submit both such applications by the application/renewal date. Upon issuance of such permits or in conjunction with such permitting, TOTAL shall file any applications necessary to incorporate the requirements of those permits into the Title V permit for the Refinery.

127. Obtaining Permit Limits For Consent Decree Emission Limits That Become

Effective After Date of Entry. Except as set forth below, as soon as practicable, but in no event later than 180 days after the effective date or establishment of any emission limits and standards under this Consent Decree other than those effective as of the Date of Entry, TOTAL shall submit applications to the relevant permitting authority to incorporate those emission limits and standards into federally enforceable minor or major new source review permits or other permits (other than Title V permits) which are federally enforceable. Upon issuance of such permit or in conjunction with such permitting, TOTAL shall file any applications necessary to incorporate the requirements of that permit into the Title V permit for the Refinery.

128. Mechanism for Title V Incorporation. The Parties agree that the incorporation of any emission limits or other standards into the Title V permits for the Refinery as required by Paragraphs 126 and 127 shall be in accordance with the applicable state or local Title V rules. To the extent possible, these will be incorporated as an administrative permit amendment.

129. Construction Permits. TOTAL agrees to obtain all required, federally enforceable permits for the construction of the pollution control technology and/or the installation of equipment necessary to implement the requirements of this Consent Decree.

## **X. EMISSION CREDIT GENERATION**

130. Summary. This Part addresses the use of emissions reductions that will result from the installation and operation of the controls required by this Consent Decree (“CD Emissions Reductions”) for the purpose of emissions netting or emissions offsets.

131. General Prohibition. TOTAL shall not generate or use any NO<sub>x</sub>, SO<sub>2</sub>, PM, VOC, or CO emissions reductions, or apply for and obtain any emission reduction credits, that result from any projects conducted or controls required pursuant to this Consent Decree as netting reductions or emissions offsets in any PSD, major non-attainment, and/or synthetic minor New

Source Review permit or permit proceeding.

132. Outside the Scope of the General Prohibition. Nothing in this Consent Decree is intended to prohibit TOTAL from seeking to:

- (i) use or generate netting reductions or emission offset credits from refinery units that are covered by this Consent Decree to the extent that the proposed netting reductions or emission offset credits represent the difference between the emissions limitations set forth in or established pursuant to this Consent Decree for such refinery units and the more stringent emissions limitations that TOTAL may elect to accept for those refinery units in a permitting process;
- (ii) use or generate netting reductions or emission offset credits for refinery units that are not subject to an emission limitation pursuant to this Consent Decree;
- (iii) use emissions reductions from the installation of controls required by this Consent Decree in determining whether a project that includes both the installation of controls under this Consent Decree and other construction that occurs at the same time and is permitted as a single project triggers major New Source Review requirements; or
- (iv) use CD Emission Reductions for the Refinery's compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and Non-Attainment New Source Review rules) that apply to the Refinery; provided, however, that TOTAL shall not be allowed to trade or sell any CD Emissions Reductions.

#### **XI. MODIFICATIONS TO IMPLEMENTATION SCHEDULES**

133. Securing Permits. For any work under this Consent Decree that requires federal, state, and/or local permits or approvals, TOTAL shall be responsible for submitting in a timely

fashion applications for such permits and approvals for work and activities required so that permit or approval decisions can be made in a timely fashion. TOTAL shall: (i) submit permit applications (i.e., applications for permits to construct, operate, or their equivalent) that comply with all applicable requirements; and (ii) secure permits after filing the applications, including timely provision of additional information, if requested. If it appears that the failure of a governmental entity to act upon or approve a timely submitted permit application may delay TOTAL's performance of work according to an applicable implementation schedule, TOTAL shall notify EPA of any such delays as soon as TOTAL reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this Consent Decree. TOTAL shall propose for approval by EPA a modification to the applicable schedule of implementation. EPA shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. All modifications to any dates initially set forth in this Decree or in any approved schedule of implementation shall be signed in writing by EPA and TOTAL, and neither the United States nor TOTAL shall be required to file such modifications with the Court in order for the modifications to be effective. Stipulated penalties shall not accrue nor be due and owing during any period between a scheduled implementation date and an approved modification to such date; provided, however, that EPA shall retain the right to seek stipulated penalties if EPA does not approve a modification to a date or dates, and TOTAL shall retain the right to dispute any claim for stipulated penalties pursuant to Part XIX. The failure of a governmental entity to act upon or approve a timely-submitted permit application shall not constitute a Force Majeure event triggering the requirements of Part XVIII.

133A. Modifications Relating to Securing EPA Approval under this Consent Decree.

a. For requirements of this Consent Decree where TOTAL is prohibited from commencing an action prior to receiving EPA approval, TOTAL will use its best efforts to submit materials that comply with all applicable requirements of this Decree and to ensure EPA's timely response to the applicable submission. If it appears that the failure by EPA to timely provide an approval that is a condition precedent to subsequent action(s) will delay TOTAL's performance of subsequent action(s), TOTAL and EPA will modify all relevant deadlines as appropriate in light of the delay. The provisions of Paragraph 267 will govern modifications under this Paragraph. If EPA fails to timely act on a modification(s) required by this Paragraph, stipulated penalties will not accrue for the period up to and including the earlier of: (i) the modified date(s) that EPA eventually determines; or (ii) the modified date(s) that this Court establishes if TOTAL pursues dispute resolution under Part XIX.

b. For requirements of this Consent Decree that are subject to EPA approval but for which TOTAL's subsequent actions are not expressly conditioned upon receipt of EPA approval, TOTAL will commence and continue with such subsequent actions even without receipt of EPA approval. If, during the course of such continuing TOTAL actions, EPA disapproves in whole or in part of the manner in which TOTAL has proceeded, extensions of all relevant deadlines may result by agreement of the parties. The provisions of Paragraph 267 will govern modifications under this Paragraph. Stipulated penalties will not accrue nor be due and owing during any period between a scheduled implementation date and an approved modification to such date; provided, however, that EPA will retain the right to seek stipulated penalties if EPA does not approve a modification to a date or dates.

c. The failure of EPA to provide a required approval in a timely manner will not constitute a force majeure event triggering the requirements of Part XVIII.

134. Commercial Unavailability of Control Equipment. TOTAL shall be solely responsible for compliance with any deadline or the performance of any work described in this Consent Decree that requires the acquisition and installation of control equipment. If it appears that the commercial unavailability of any control equipment may delay TOTAL's performance of work according to an applicable implementation schedule, TOTAL shall notify EPA of any such delays as soon as TOTAL reasonably concludes that the delay could affect its ability to comply with the implementation schedule set forth in this Decree. TOTAL may propose for approval by EPA a modification to the applicable schedule of implementation. Prior to the notice required by this Paragraph, TOTAL must have contacted a reasonable number of vendors of such equipment and obtained a written representation (or equivalent communication to EPA) from the vendor that the equipment is commercially unavailable. In the notice, TOTAL shall reference this Paragraph, identify the milestone date(s) it contends it will not be able to meet, provide EPA with written correspondence to the vendor identifying efforts made to secure the control equipment, and describe the specific efforts TOTAL has taken and will continue to take to find such equipment. TOTAL may propose a modified schedule or modification of other requirements of this Consent Decree to address such commercial unavailability. Part XIX shall govern the resolution of any claim of commercial unavailability. EPA shall not unreasonably withhold its consent to requests for modifications of schedules of implementation if the requirements of this Paragraph are met. All modifications to any dates initially set forth in this Consent Decree or in any approved schedule of implementation shall be signed in writing by EPA and TOTAL, and neither the United States nor TOTAL shall be required to file such

modifications with the Court in order for the modifications to be effective. Stipulated penalties shall not accrue nor be due and owing during any period between an originally-scheduled implementation date and an approved modification to such date; provided, however, that EPA shall retain the right to seek stipulated penalties if EPA does not approve a modification to a date or dates. The commercial unavailability of any control equipment shall not constitute a Force Majeure event triggering the requirements of Part XVIII.

## **XII. SUPPLEMENTAL ENVIRONMENTAL PROJECT**

135. TOTAL shall implement a "Passive, Infrared Imaging of Refinery Equipment and Components and Follow-Up Actions" project ("Infrared Imaging SEP"), in accordance with the provisions in Appendix D.

136. Part I of the Infrared Imaging SEP shall be completed within six months after the Date of Entry of this Consent Decree and will include the following:

- (i) TOTAL shall conduct passive, infrared imaging of all Refinery components subject to the LDAR rules at 40 C.F.R. Part 60, Subpart GGG, Part 61, Subparts J and V, and Part 63, Subparts F, H, and CC. This requirement shall not apply to components that are difficult or unsafe to monitor with the infrared imaging equipment.
- (ii) TOTAL shall monitor, in accordance with Method 21, at least 1,000 Refinery components imaged pursuant to subparagraph 136(i) concurrently with such imaging.
- (iii) The 1,000 components subject to concurrent imaging and Method 21 monitoring, pursuant to subparagraph 136(ii), shall include any component imaged pursuant to subparagraph 136(i) from which the imaging detects emissions, up to a maximum of 500 such components. The remaining 1,000 components subject to concurrent

imaging and Method 21 monitoring shall consist of components from which the imaging does not detect emissions, and the number of such components shall be the greater of (1) 500, or (2) the difference between 1,000 and the number of components imaged pursuant to subparagraph 136(i) from which the imaging detects emissions.

- (iv) TOTAL shall repair, in accordance with the LDAR requirements, any component found to be leaking under the standards set by the LDAR regulations and Method 21.

137. Part II of the Infrared Imaging SEP shall be completed as soon as practical after the Date of Entry of this Consent Decree, consistent with Refinery operational needs, but in no event more than two years after the Date of Entry. Part II of the Infrared Imaging SEP will include the following:

- (i) TOTAL shall conduct passive infrared imaging of all Refinery components and operations not so imaged pursuant to Part I of the Infrared Imaging SEP.
- (ii) With respect to Refinery components and operations imaged pursuant to subparagraph 137(i), TOTAL shall comply with all requirements of this Consent Decree and the LDAR regulations applicable to such components and operations only for such components and operations found to be leaking under the standards set by the LDAR regulations and Method 21.

138. TOTAL is responsible for the satisfactory completion of the Infrared Imaging SEP in accordance with the requirements of this Consent Decree. "Satisfactory completion" means that TOTAL shall complete the work in accordance with all work plans and specifications

for the project, regardless of cost. TOTAL may use contractors and/or consultants in planning and implementing the Infrared Imaging SEP.

139. TOTAL acknowledges that no part of the work conducted pursuant to the Infrared Imaging SEP is a substitute for, or may be offered in lieu of, compliance with any LDAR requirements, including, but not limited to, monitoring and repair.

140. With regard to the Infrared Imaging SEP, TOTAL certifies the truth and accuracy of each of the following:

- (i) All cost information provided to EPA in connection with EPA's approval of the Infrared Imaging SEP is complete and accurate, and represents a fair estimate of the costs necessary to implement Part I of the SEP.
- (ii) As of the date it signed this Consent Decree, TOTAL was not required to perform or develop the Infrared Imaging SEP by any federal, state, or local law or regulation, nor was TOTAL required to perform or develop the Infrared Imaging SEP by agreement, grant, or as injunctive relief awarded in any other action in any forum.
- (iii) The Infrared Imaging SEP is not a project that TOTAL was planning or intending to construct, perform, or implement other than in settlement of the claims resolved in this Consent Decree. TOTAL has not received, and will not receive, credit for the Infrared Imaging SEP in any other enforcement action.
- (iv) TOTAL will not receive any reimbursement for any portion of the cost of the Infrared Imaging SEP from any other person or entity.

141. Infrared Imaging SEP Completion Report. Within 60 days after the date set for completion of Part II of the Infrared Imaging SEP, TOTAL shall submit a Infrared Imaging SEP

Completion Report to the United States in accordance with Paragraph 264. The Infrared Imaging SEP Completion Report shall contain the following: (i) a detailed description of the Infrared Imaging SEP as implemented; (ii) a description of any problems encountered in completing the Infrared Imaging SEP and the solutions thereto; (iii) an itemized list of all eligible Infrared Imaging SEP costs; (iv) a certification that the Infrared Imaging SEP has been fully implemented pursuant to the provisions of this Consent Decree; and (v) a description of the environmental and public health benefits resulting from the implementation of the Infrared Imaging SEP, with a quantification of the benefits and pollutant reductions, if feasible.

142. EPA may, in its sole, unreviewable discretion, require information in addition to that described in the Paragraph 141 in order to determine the adequacy of the Infrared Imaging SEP.

143. After receiving the Infrared Imaging SEP Completion Report, the United States shall notify TOTAL whether or not TOTAL has completed the Infrared Imaging SEP satisfactorily. If TOTAL has not completed the Infrared Imaging SEP satisfactorily in accordance with all schedules, the United States may assess Stipulated Penalties pursuant to Part XV.

144. Disputes between the United States and TOTAL concerning the satisfactory performance of the Infrared Imaging SEP and the amount of eligible Infrared Imaging SEP costs are subject to dispute resolution pursuant to Part XIX. EPA's position with respect to all other disputes arising in connection with the Infrared Imaging SEP is final and unreviewable, and is not subject to dispute resolution.

145. Each submission required under this Part shall be signed by an official with knowledge of the Infrared Imaging SEP and contain the certification statement set forth in Paragraph 147.

146. Any public statement, oral or written, in print, film, or other media, made by TOTAL referring to the Infrared Imaging SEP shall include the following language: "This project was undertaken in connection with the settlement of an enforcement action, United States v. TOTAL Petrochemicals USA, Inc. (E.D. Tex.), taken on behalf of the United States Environmental Protection Agency under the Clean Air Act."

### **XIII. REPORTING AND RECORDKEEPING**

147. Beginning with the first full Calendar Quarter after the Date of Entry of this Consent Decree, TOTAL shall submit to EPA, within 30 days after the end of each Calendar Quarter, a progress report for the Refinery. Each such report shall contain the following: (i) a description of all efforts to implement the requirements of this Consent Decree in the applicable Calendar Quarter; (ii) a summary of all emissions data for the Refinery required by this Decree for the applicable Calendar Quarter; (iii) a description of any anticipated problems with meeting the requirements of the Decree; and (iv) any such additional matters that TOTAL believes should be brought to the attention of EPA. Each report shall contain the following certification statement by the person responsible for overseeing the implementation of this Consent Decree:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

#### **XIV. CIVIL PENALTY**

148. In satisfaction of the civil claims asserted by the United States in the Complaint filed in this matter, by no later than 30 days after the Date of Entry of this Consent Decree, TOTAL shall pay a civil penalty of \$2,900,000.

149. Payment shall be made by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number, DOJ Case Number 90-5-2-08283/3, and the civil action case name and case number of this action in the Eastern District of Texas. The costs of such EFT shall be the responsibility of TOTAL. Payment shall be made in accordance with instructions provided to TOTAL by the Financial Litigation Unit of the United States Attorney's Office for the Eastern District of Texas. Any funds received after 11:00 a.m. (EDT) shall be credited on the next business day. TOTAL shall provide notice of payment, referencing the USAO File Number, DOJ Case Number 90-5-2-08283/3, and the civil action case name and case number, to the United States as provided in Paragraph 264.

150. The civil penalty set forth herein, as well as any stipulated penalty incurred pursuant to Part XV, is a penalty within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and, therefore, TOTAL will not treat such penalty payment as tax deductible for purposes of federal, state, regional, or local law.

151. Upon the Date of Entry, this Consent Decree will constitute an enforceable judgment for purposes of post-judgment collection in accordance with Rule 69 of the Federal Rules of Civil Procedure, the Federal Debt Collection Procedures Act, 28 U.S.C. § 3001, et seq., and other applicable federal authority. The United States will be deemed a judgment creditor for purposes of collecting any unpaid amounts of the penalty and interest pursuant to this Part, or any stipulated penalty owed pursuant to Part XV.

## **XV. STIPULATED PENALTIES**

152. TOTAL shall pay stipulated penalties, as provided in this Part, to the United States for each failure by TOTAL to comply with the terms of this Consent Decree. Stipulated penalties shall be calculated in the amounts specified in this Part. Stipulated penalties under Paragraphs 153, 155, 157, and 159 shall not start to accrue until there is noncompliance with the concentration-based, rolling average emission limits identified in those Paragraphs for 5% or more of the applicable unit's operating time during any Calendar Quarter. For those provisions where a stipulated penalty of either a fixed amount or 1.2 times the economic benefit of delayed compliance is available, the decision of which alternative to seek shall rest exclusively within the discretion of the United States. Where a single event triggers more than one stipulated penalty provision, only the higher of the individual stipulated penalties shall apply.

### **A. Non-Compliance with Requirements for Control of NO<sub>x</sub> Emissions from FCCUs**

153. For each failure to meet the emissions limit for NO<sub>x</sub> set forth in Paragraph 11, per unit, per day: \$750 for each day in a Calendar Quarter on which the specified 7-day rolling average exceeds the applicable limit; and \$2,500 for each day in a Calendar Quarter on which the specified 365-day rolling average exceeds the applicable limit.

154. For failure to install, certify, calibrate, maintain, and/or operate a NO<sub>x</sub> CEMS as required by Paragraphs 12 and 28, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**B. Non-Compliance with Requirements for Control of SO<sub>2</sub> Emissions from FCCUs**

155. For failure to meet the emissions limit for SO<sub>2</sub> set forth in Paragraph 13, per unit, per day: \$750 for each day in a Calendar Quarter on which the specified 7-day rolling average exceeds the applicable limit; and \$2,500 for each day in a Calendar Quarter on which the specified 365-day rolling average exceeds the applicable limit.

156. For failure to install, certify, calibrate, maintain, and/or operate a SO<sub>2</sub> CEMS as required by Paragraphs 14 and 28, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**C. Non-Compliance with Requirements for Control of PM Emissions from FCCUs**

157. For failure to meet the emissions limit for PM set forth in Paragraph 15, per unit, per day: \$3,000 for each day in a Calendar Quarter on which emissions exceed the applicable limit.

158. For failure to comply with the alternative continuous parameter monitoring protocol as required by Paragraph 16, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**D. Non-Compliance with Requirements for Control of CO Emissions from FCCUs**

159. For failure to meet the emissions limit for CO set forth in Paragraph 17, per unit, per day: \$750 for each day in a Calendar Quarter on which the specified 1-hour rolling average exceeds the applicable limit; and \$2,500 for each day in a Calendar Quarter on which the specified 365-day rolling average exceeds the applicable limit.

160. For failure to install, certify, calibrate, maintain, and/or operate a CO CEMS as required by Paragraphs 18 and 28, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**E. Non-Compliance with Requirements for Control of NOx Emissions from Heaters and Boilers**

161. For failure to meet the emissions limit for NOx set forth in Paragraph 20, per unit, per day: \$3,000 for each day in a Calendar Quarter on which the emissions exceed the applicable limit.

162. For failure to submit any written deliverable required by Paragraphs 22 and 23, per deliverable, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500

Beyond 60 <sup>th</sup> day after deadline	\$1,000
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163. For failure to comply with the NOx monitoring requirements pursuant to

Paragraphs 25, 26, and 28, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,000
Beyond 60 <sup>th</sup> day after deadline	\$2,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**F. Non-Compliance with Requirements for Control of SO<sub>2</sub> Emissions from Heaters and Boilers**

164. For burning any fuel gas that contains H<sub>2</sub>S in excess of the applicable requirements of NSPS Subparts A and J in one or more heaters or boilers or other identified equipment listed in Appendix A, per event, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$2,500
Beyond 31 <sup>st</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

165. For burning Fuel Oil in any combustion unit at the Refinery, in violation of

Paragraph 30, per unit, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$1,750
Beyond 31 <sup>st</sup> day after deadline	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

**G. Non-Compliance with Requirements for NSPS Applicability to SRPs**

166. For failure to comply with the NSPS Subpart J emission limits at the Refinery SRPs pursuant to Paragraph 32, per unit, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day	\$2,000
Beyond 60 <sup>th</sup> day	\$3,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

167. For failure to comply with the monitoring requirements of Paragraph 31, per unit, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$1,500
Beyond 60 <sup>th</sup> day after deadline	\$2,000

168. For failure to route all sulfur pit emissions in accordance with the requirements of Paragraph 33(b), per unit, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,750
Beyond 60 <sup>th</sup> day	\$4,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

169. For failure to submit and comply with the Preventive Maintenance and Operation Plan, pursuant to Paragraph 35, per day:

<u>Period of Non-Compliance</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,500
Beyond 60 <sup>th</sup> day	\$2,000

170. For failure to provide any written deliverable required by Paragraphs 35 and 36 other than the PMO Plan, per deliverable, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day after deadline	\$200
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$500
Beyond 60 <sup>th</sup> day after deadline	\$1,000

**H. Non-Compliance with Requirements for NSPS Applicability to Flaring Devices**

171. For failure to comply with NSPS Subpart J with respect to Flaring Devices at the Refinery pursuant to Paragraphs 38 and 39, per violation, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,500
Beyond 60 <sup>th</sup> day	\$2,000

172. For failure to submit the NSPS Subpart J compliance report as required by Paragraph 40, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,500
Beyond 60 <sup>th</sup> day	\$2,000

**I. Non-Compliance with Requirements for Benzene Waste NESHAP Program Enhancements**

173. For failure to comply with the benzene waste limit required by Paragraph 62: \$10,000 per 30% increment that the limit is exceeded.

174. For failure to certify compliance as required by Paragraph 64, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000

175. For failure to comply with the requirements set forth in Paragraphs 65, 66, and 67 for use, monitoring and replacement of carbon canisters: \$1,000 per incident of noncompliance, per day.

176. For failure to submit or maintain any records or materials as required by Paragraphs 68 and 69: \$2,000 per record or submission.

177. For failure to establish an annual review program to identify new benzene waste streams as required by Paragraph 70: \$2,500 per month.

178. For failure to perform any laboratory audits required under Paragraphs 71, 72, and 73: \$5,000 per month, per missed audit.

179. For failure to manage any spill of materials known to contain VOCs in accordance with the requirements of Paragraph 75: \$15,000 per spill.

180. For failure to implement the training requirements as set forth in Paragraphs 76, 77, and 78: \$10,000 per quarter.

181. For failure to submit any schematics as required by Paragraph 79, per schematic, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,500
Beyond 60 <sup>th</sup> day	\$2,000

182. For failure to install controls on waste management units handling organic wastes as required by Paragraphs 79, 80, and 81, per waste management unit: \$10,000 per month.

183. For failure to submit any plans or other deliverables required by Paragraph 82, per deliverable: \$10,000 per month.

184. For failure to conduct sampling in accordance with the sampling plan required by Paragraph 82: \$5,000 per week, per stream, or \$30,000 per quarter, per stream, whichever is greater, but not to exceed \$150,000 per quarter, per stream.

185. For failure to perform and/or report the calculations required by Paragraph 85, per calculation, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000

186. For failure to prepare and submit the report required by Paragraph 86, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000

187. For failure to prepare, submit, and/or implement a BWON Corrective Measures Plan as required by Paragraphs 86 and 87, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

188. For failure to retain a third-party contractor, and/or submit and/or implement a plan for remedying any deficiencies identified in a Third-Party TAB Study and Compliance

Review pursuant to Paragraph 88, per violation, per day:

1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

189. For failure to conduct monthly visual inspections of all water traps as required by Paragraph 90: \$500 per drain not inspected.

190. For failure to identify and/or mark segregated storm water drains as required by Paragraph 90: \$1,000 per week per drain.

191. For failure to monitor conservation vents as required by Paragraph 90: \$500 per vent not monitored.

192. For failure to conduct monitoring of API Separators as required by Paragraph 90: \$1,000 per month, per unit.

193. For failure to comply with any of the requirements of Paragraphs 91, 92, and 93, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1 <sup>st</sup> through 30 <sup>th</sup> day	\$1,250

31 <sup>st</sup> through 60 <sup>th</sup> day	\$3,000
Beyond 60 <sup>th</sup> day	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

194. For failure to submit the written deliverables required by Paragraphs 94 and 95:  
\$1,000 per week, per deliverable.

195. If it is determined through federal, state, or local investigation that TOTAL has failed to include all benzene waste streams in any TAB calculation for the Refinery, TOTAL shall pay the following, per waste stream:

<u>Waste Stream</u>	<u>Penalty</u>
for waste streams < 0.03 Mg	\$250
for waste streams between 0.03 and 0.1 Mg/yr	\$1,000
for waste streams between 0.1 and 0.5 Mg/yr	\$5,000
for waste streams > 0.5 Mg/yr	\$10,000

**J. Non-Compliance with Requirements for Leak Detection and Repair Program Enhancements**

196. For failure to develop an LDAR Program as required by Paragraph 97: \$3,500 per week.

197. For failure to implement the training programs required by Paragraph 98: \$10,000 per month, per program.

198. For failure to conduct any of the audits required by Paragraphs 99 and 101:  
\$5,000 per month, per audit.

199. For failure to implement any actions necessary to correct noncompliance as required by Paragraph 102:

<u>Period of Delay</u>	<u>Penalty per day</u>
1st through 30 <sup>th</sup> day after deadline	\$1,250
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$3,000
Beyond 60 <sup>th</sup> day after deadline	\$5,000 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater

200. For failure to perform monitoring using the lower internal leak rate definitions as specified in Paragraph 103: \$100 per component, but not greater than \$10,000 per month, per process unit.

201. For failure to repair and re-monitor leaks, as required by Paragraph 105, in excess of the lower leak definitions specified in Paragraph 103: \$100 per component, but not greater than \$10,000 per month, (except that Paragraph 202 shall apply in lieu of this Paragraph where both paragraphs are potentially applicable).

202. For failure to implement the "initial attempt" repair program as required by Paragraph 108: \$100 per valve, but not greater than \$10,000 per month.

203. For failure to use dataloggers or maintain electronic data as required by Paragraphs 109 and 110: \$5,000 per month.

204. For failure to implement the quarterly QA/QC procedures as required by Paragraphs 111 through 114: \$10,000 per month.

205. For failure to implement and comply with the LDAR monitoring program as required by Paragraphs 106 and 107: \$100 per component, but not greater than \$10,000 per month, per unit.

206. For failure to designate and/or maintain an individual as accountable for LDAR performance as required in Paragraph 115: \$3,750 per week.

207. For failure to conduct the calibration drift assessments or remonitor valves and pumps based on calibration drift assessments in Paragraphs 116 and 117: \$100 per missed event.

208. For failure to comply with the requirements for repair set forth in Paragraph 121: \$5,000 per valve or pump, per incident of non-compliance.

209. For failure to repair any chronic leaker valves as required under Paragraph 122: \$5,000 per valve.

210. For failure to submit any written deliverables required by Paragraphs 123, 124, and 125: \$1,000 per week, per report.

211. If it is determined through a federal, state, or local investigation that TOTAL has failed to include all valves and pumps in its LDAR program, TOTAL shall pay \$175 per component that it failed to include.

**K. Non-Compliance with Permit Incorporation Requirements**

212. For each failure to submit an application as required by Part IX, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1st through 30 <sup>th</sup> day after deadline	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2,500
Beyond 60 <sup>th</sup> day	\$5,000

**L. Non-Compliance with Requirements Related to Supplemental Environmental Project**

213. For failure to comply with any requirement for the Infrared Imaging SEP under Part XII, per requirement, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1st through 30 <sup>th</sup> day after deadline	\$1,000
31 <sup>st</sup> through 60 <sup>th</sup> day after deadline	\$2,500
Beyond 60 <sup>th</sup> day	\$5,000

**M. Non-Compliance with Requirements for Reporting and Recordkeeping**

214. For failure to submit reports as required by Part XIII, beginning on the 7<sup>th</sup> day past the report's due date, per report, per day:

<u>Period of Delay</u>	<u>Penalty per day</u>
1st through 30 <sup>th</sup> day	\$500
31 <sup>st</sup> through 60 <sup>th</sup> day	\$1,000
Beyond 60 <sup>th</sup> day	\$2,000

**N. Non-Compliance with Requirements for Payment of Civil Penalty**

215. For failure to pay the civil penalty as required by Part XIV: \$15,000 per day plus interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

**O. Non-Compliance with Requirement to Pay Stipulated Penalties**

216. For failure to pay or escrow stipulated penalties as required by Paragraphs 217 and 219: \$2,500 per day, per penalty, plus interest on the amount overdue at the rate specified in 28 U.S.C. § 1961(a).

**P. General Provisions Related to Stipulated Penalties**

217. Stipulated penalties under this Part will begin to accrue on the day after performance is due or on the day a violation occurs, whichever is applicable, and will continue to accrue until performance is satisfactorily completed or until the violation ceases. TOTAL shall pay stipulated penalties upon written demand by the United States no later than 60 days after

TOTAL receives such demand. A demand for the payment of stipulated penalties will identify the particular violation(s) to which the stipulated penalty relates, the stipulated penalty amount for each violation (as can be best estimated), the calculation method underlying the demand, and the grounds upon which the demand is based. The United States may, in its unreviewable discretion, waive payment of all or any portion of stipulated penalties that may accrue under this Consent Decree.

218. Stipulated penalties shall be paid to the United States in the manner set forth in Paragraph 149.

219. Should TOTAL dispute the United States' demand for all or part of a stipulated penalty, it may avoid the imposition of a stipulated penalty for failure to pay a stipulated penalty under Paragraph 216 by placing the disputed amount demanded in a commercial escrow account pending resolution of the matter and by invoking the dispute resolution provisions of Part XIX within the time provided in Paragraph 217 for payment of stipulated penalties. If the dispute is thereafter resolved in TOTAL's favor, the escrowed amount plus accrued interest shall be returned to TOTAL; otherwise, EPA shall be entitled to the amount that was determined to be due by the Court, plus the interest that has accrued in the escrow account on such amount. The United States reserves the right to pursue any other non-monetary remedies to which it is legally entitled, including, but not limited to, injunctive relief for TOTAL's violations of this Consent Decree.

## **XVI. INTEREST**

220. TOTAL shall be liable for interest on the unpaid balance of stipulated penalties to be paid in accordance with Part XV. All such interest shall accrue at the rate established pursuant to 28 U.S.C. § 1961(a) – i.e., a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last

auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of this Consent Decree. Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due through the date of actual payment. For purposes of this Paragraph, interest will cease to accrue on the amount of any stipulated penalty payment placed into an interest bearing escrow account as provided by Paragraph 219.

#### **XVII. RIGHT OF ENTRY**

221. Any authorized representative of EPA, upon presentation of credentials, shall have a right of entry upon the premises of the facilities of the Refinery at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment and systems, and inspecting and copying all records maintained by TOTAL pursuant to this Consent Decree or deemed necessary by EPA to verify compliance with the Decree. TOTAL shall retain such records for the period of this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA to conduct tests, inspections, or other activities under any statutory or regulatory authority.

#### **XVIII. FORCE MAJEURE**

222. If any event occurs or fails to occur that causes or may cause a delay or impediment to performance in compliance with any provision of this Consent Decree, TOTAL shall notify EPA in writing as soon as practicable, but in any event within 10 Working Days of the date when TOTAL first knew of the event or should have known of the event by the exercise of due diligence. In this notice, TOTAL shall specifically reference this Part and describe the anticipated length of time the delay may persist, the cause or causes of the delay, the measures taken or to be taken by TOTAL to prevent or minimize the delay, and the schedule by which those measures shall be implemented. TOTAL shall take all reasonable steps to avoid or minimize such delays. The notice required by this Part shall be effective upon the mailing of the

notice by certified mail, return receipt requested, to EPA in the manner specified in Paragraph 264.

223. Failure by TOTAL to substantially comply with the notice requirements of Paragraph 222 shall render this Part voidable by the United States as to the specific event for which TOTAL has failed to comply with such notice requirements, and, if voided, this Part is of no effect as to the particular event involved.

224. The United States shall notify TOTAL in writing regarding its claim of a delay or impediment to performance within 45 days of receipt of the notice required under Paragraph 222.

225. If the United States agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of TOTAL, including any entity controlled by TOTAL, and that TOTAL could not have prevented the delay by the exercise of due diligence, the United States and TOTAL shall stipulate in writing to an extension of the required deadlines(s) for all requirement(s) affected by the delay for a period equivalent to the delay actually caused by such circumstances. Such stipulation shall be treated as a non-material modification to this Consent Decree pursuant to Paragraph 267. TOTAL shall not be liable for stipulated penalties for the period of any such delay.

226. If the United States does not accept TOTAL's claim of a delay or impediment to performance, TOTAL must submit the matter to the Court for resolution to avoid payment of stipulated penalties by filing a petition with the Court no later than 30 days after receipt of the United States' notice pursuant to Paragraph 224. Once TOTAL has submitted this matter to the Court, the United States shall have 45 days to file its response to the petition. If the Court determines that the delay or impediment to performance has been or will be caused by circumstances beyond the control of TOTAL, including any entity controlled by TOTAL, and

that Total could not have prevented the delay by the exercise of due diligence, TOTAL shall be excused as to that event(s) and associated delay (including stipulated penalties) for a period of time equivalent to the delay caused by such circumstances.

227. TOTAL shall bear the burden of proving that any delay in complying with any requirement(s) of this Consent Decree was caused by or will be caused by circumstances beyond its control, including any entity controlled by Total, and that it could not have prevented the delay by the exercise of due diligence. TOTAL also shall bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date or dates.

228. Unanticipated or increased costs or expenses associated with the performance of TOTAL's obligations under this Consent Decree shall not constitute circumstances beyond its control, or serve as the basis for an extension of time under this Part.

229. Notwithstanding any other provision of this Consent Decree, the parties do not intend for this Court to draw any inferences or establish any presumptions adverse to any Party as a result of TOTAL serving a force majeure notice or the Parties' inability to reach agreement regarding a force majeure claim.

230. As part of the resolution of any matter submitted to this Court under this Part, the Parties (by agreement), or the Court (by order), may extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay or impediment to performance agreed to by the United States or approved by this Court. TOTAL shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

## **XIX. RETENTION OF JURISDICTION/DISPUTE RESOLUTION**

231. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of this Consent Decree and adjudicating all disputes between the United States and TOTAL that may arise under the provisions of this Consent Decree until the Decree terminates in accordance with Part XXII.

232. The dispute resolution procedure set forth in this Part shall be available to resolve any and all disputes arising under this Consent Decree, provided that the Party making such application has made a good faith attempt to resolve the matter with the other Party.

233. The dispute resolution procedure required herein shall be invoked by one Party giving to the other written notice of a dispute pursuant to this Part. The notice shall describe the nature of the dispute, and shall state the noticing Party's position with regard to such dispute.

234. Disputes submitted to dispute resolution shall, in the first instance, be the subject of informal negotiations between the Parties. Such period of informal negotiations shall not extend beyond 90 days from the date of the first meeting between representatives of the Parties, unless the Parties agree in writing that this period should be extended.

235. In the event that the Parties are unable to reach agreement during the informal negotiation period pursuant to Paragraph 234, the United States shall provide TOTAL with a written summary of its position regarding the dispute. The United States' position shall be considered binding unless, within 45 days of TOTAL's receipt of the written summary of the United States' position, TOTAL files with the Court a petition that describes the nature of the dispute. The United States shall respond to the petition within 60 days of the petition's filing. In resolving the dispute between the parties, the Court shall uphold the position of the United States if it is supported by substantial evidence in the administrative record.

236. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set forth in this Part may be shortened upon motion of one of the Parties.

237. The Parties do not intend that the invocation of this Part by a Party cause the Court to draw any inferences or establish any presumptions adverse to either Party.

238. As part of the resolution of any dispute under this Part, the Parties, by agreement, or the Court, by order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of the dispute resolution process. TOTAL shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

## **XX. EFFECT OF SETTLEMENT**

239. Definitions. For purposes of this Part, the following definitions apply:

(1) “Applicable NSR/PSD Requirements” shall mean: PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. §§ 52.21 and 51.166; the portions of the applicable SIPs and related rules adopted as required by 40 C.F.R. §§ 51.165 and 51.166; “Plan Requirements for Non-Attainment Areas” at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503, and the regulations promulgated thereunder at 40 C.F.R. §§ 51.165(a) and (b), Part 51, Appendix S, and § 52.24; any Title V regulations that implement, adopt, or incorporate the specific regulatory requirements identified above; any applicable state or local regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above; and any Title V permit provisions that implement, adopt, or incorporate the specific regulatory requirements identified above.

(2) “Applicable NSPS Subparts A and J Requirements” shall mean the standards, monitoring, testing, reporting, and recordkeeping requirements found at 40 C.F.R. §§ 60.100

through 60.109 (Subpart J) relating to a particular pollutant and a particular affected facility, and the corollary general requirements found at 40 C.F.R. §§ 60.1 through 60.19 (Subpart A) that are applicable to any affected facility covered by Subpart J; any Title V regulations that implement, adopt, or incorporate the specific regulatory requirements identified above; any applicable state or local regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above; and any Title V permit provisions that implement, adopt, or incorporate the specific regulatory requirements identified above.

(3) "Post-Lodging Compliance Dates" shall mean any dates in this Part after the Date of Lodging. Post-Lodging Compliance Dates include dates certain (e.g., "December 31, 2007"), dates after Lodging represented in terms of "months after Lodging" (e.g., "12 months after the Date of Lodging"), and dates after Lodging represented by actions taken (e.g., "Date of Certification"). The Post-Lodging Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of this Consent Decree.

240. Resolution of Liability Regarding the Applicable NSR/PSD Requirements. With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability (including any continuing liability, until the Post-Lodging Compliance Dates) of TOTAL to the United States for violations of the Applicable NSR/PSD Requirements resulting from pre-Lodging construction or modification:

<u>Unit</u>	<u>Pollutant</u>	<u>Post-Lodging Compliance Date</u>
FCCU	NOx	12/31/09 for NOx and Date of Entry for SO <sub>2</sub>
Heaters and boilers	SO <sub>2</sub>	12/31/09 for NOx Interim Limit, 12/31/13 for NOx Final Limit, and Date of Entry for SO <sub>2</sub>
Flaring Devices	NOx	Date of Entry for the North Flare, 48 months following Date of Entry for all other Flaring Devices
	SO <sub>2</sub>	

241. Resolution of Liability for CO Emissions under the Applicable NSR/PSD Requirements. Entry of this Consent Decree shall resolve all civil liability of TOTAL to the United States for violations of the Applicable NSR/PSD Requirements relating to CO emissions resulting from pre-Lodging construction or modification.

242. Resolution of Liability for PM Emissions under the Applicable NSR/PSD Requirements. Entry of this Consent Decree shall resolve all civil liability of TOTAL to the United States for violations of the Applicable NSR/PSD Requirements relating to PM emissions resulting from pre-Lodging construction or modification.

243. Reservation of Rights Regarding Applicable NSR/PSD Requirements: Release for Violations Continuing After the Date of Lodging Can Be Rendered Void. Notwithstanding the resolution of liability in Paragraphs 240 through 242, the releases of liability by the United States to TOTAL for violations of the Applicable NSR/PSD Requirements shall be rendered void if TOTAL fails to comply with the obligations and requirements of Part V, Sections A through D (relating to FCCUs); provided, however, that the releases in Paragraphs 240 through 242 shall not be rendered void if TOTAL remedies such failure and pays any stipulated penalties due as a result of such failure.

244. Exclusions from Release Coverage Regarding Applicable PSD/NSR

Requirements: Construction and/or Modification Not Covered by Paragraphs 240 Through 242.

Notwithstanding the resolution of liability in Paragraphs 240 through 242, nothing in this Consent Decree precludes the United States from seeking from TOTAL injunctive relief, penalties, or other appropriate relief for violations by TOTAL of the Applicable NSR/PSD Requirements resulting from: (i) construction or modification that commenced prior to the Date of Lodging of this Consent Decree, if the resulting violations relate to pollutants or units not covered by the Decree; or (ii) any construction or modification that commences after the Date of Lodging.

245. Evaluation of Applicable PSD/NSR Requirements. Increases in emissions from units covered by this Consent Decree, where the increases result from the Post-Lodging construction or modification of any units within the Refinery, are beyond the scope of the release in Paragraphs 240 through 242, and TOTAL is not relieved from any obligation to evaluate any such increases in accordance with the Applicable PSD/NSR Requirements.

246. Resolution of Liability Regarding Applicable NSPS Subparts A and J Requirements. With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability of TOTAL to the United States for violations of the Applicable NSPS Subparts A and J Requirements from the date that the Pre-Lodging claims of the United States accrued up to the specified Post-Lodging Compliance Date:

<u>Unit</u>	<u>Pollutant</u>	<u>Post-Lodging Compliance Date</u>
FCCUCR	SO <sub>2</sub> , PM, CO, Opacity	Date of Entry
Heaters and boilers	SO <sub>2</sub>	Date of Entry
Flaring Devices	SO <sub>2</sub>	Date of Entry for the North Flare, 48 months following Date of Entry for all other Flaring Devices
SRPs	SO <sub>2</sub>	48 months following Date of Entry

247. Reservation of Rights Regarding Applicable NSPS Subparts A and J

Requirements: Release for Violations Continuing After the Date of Lodging Can Be Rendered

Void. Notwithstanding the resolution of liability in Paragraph 246, the releases of liability by the United States to TOTAL for violations of the Applicable NSPS Subparts A and J Requirements shall be rendered void if TOTAL fails to comply with the obligations and requirements of Parts V and VI (relating to NSPS requirements) of this Consent Decree; provided, however, that the releases in Paragraph 246 shall not be rendered void if TOTAL remedies such failure and pays any stipulated penalties due as a result of such failure.

248. Prior NSPS Applicability Determinations. Nothing in this Consent Decree shall affect the status of any FCCU, heater or boiler, fuel gas combustion device, or sulfur recovery plant currently subject to NSPS as previously determined by any federal, state, or local authority or any applicable permit.

249. Resolution of Liability Regarding Benzene Waste NESHAP Requirements. Entry of this Consent Decree shall resolve all civil liability of TOTAL to the United States for violations of the statutory and regulatory requirements set forth below in subparagraphs a. and b. (the "BWON Requirements") that commenced prior to the Date of Lodging:

- a. Benzene Waste NESHAP. The National Emission Standard for Benzene

Waste Operations, 40 C.F.R. Part 61, Subpart FF, promulgated pursuant to Section 112(e) of the Act, 42 U.S.C. § 7412(e), including any federal regulation that adopts or incorporates the requirements of Subpart FF by express reference, but only to the extent of such adoption or incorporation; and

b. Any applicable, federally-enforceable state or local regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified in Paragraph 249.a. above.

250. Resolution of Liability Regarding LDAR Requirements. Entry of this Consent Decree shall resolve all civil liability of TOTAL to the United States for violations of the statutory and regulatory requirements set forth below in subparagraphs a. and b. that (i) commenced and ceased prior to the Date of Lodging of this Consent Decree, or (ii) commenced prior to the Date of Lodging and continued past the Date of Lodging, provided that the events giving rise to such post-Lodging violations are identified by TOTAL in its Initial Compliance Audit Report submitted pursuant to Paragraph 99 and corrected by TOTAL as required under Paragraph 102:

a. LDAR Requirements. For all equipment in light liquid and gas and/or vapor service, the LDAR requirements promulgated by EPA pursuant to Sections 111 and 112 of the Clean Air Act and codified at 40 C.F.R. Part 60, Subparts VV and GGG, 40 C.F.R. Part 61, Subparts J and V, and 40 C.F.R. Part 63, Subparts F, H, and CC;

b. Any applicable, federally-enforceable state or local regulations or permits that implement, adopt, or incorporate the specific regulatory requirements identified in Paragraph 250.a. above.

251. Reservation of Rights Regarding Benzene NESHAP and LDAR Requirements.

Notwithstanding the resolution of liability in Paragraphs 249 and 250, nothing in this Consent Decree precludes the United States from seeking from TOTAL injunctive and/or other equitable relief or civil penalties for violations by TOTAL of Benzene Waste NESHAP and/or LDAR requirements that (i) commenced prior to the Date of Lodging of this Consent Decree and continued after the Date of Lodging if TOTAL fails to identify and address such violations as required by Paragraph 99, or (ii) commenced after the Date of Lodging.

252. Audit Policy. Nothing in this Consent Decree is intended to limit or disqualify TOTAL, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy to any violations or noncompliance that TOTAL discovers during the course of any investigation, audit, or enhanced monitoring that TOTAL is required to undertake pursuant to this Consent Decree.

253. Claim/Issue Preclusion. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, penalties, or other appropriate relief relating to TOTAL for violations of the PSD/NSR, NSPS, NESHAP, and/or LDAR requirements not identified in this Part:

a. TOTAL shall not assert, and may not maintain, in any subsequent administrative, civil, or criminal action commenced by the United States any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, or claim-splitting. Nor may TOTAL assert or maintain any other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding should have been brought in the instant case. Nothing in the preceding sentences is intended to affect the ability of TOTAL to assert that the claims are deemed resolved by virtue of this Part.

b. Except as set forth in Paragraph 253.a., above, the United States may not assert or maintain that this Consent Decree constitutes a waiver or determination of, or otherwise obviates, any claim or defense whatsoever, or that this Consent Decree constitutes acceptance by TOTAL of any interpretation or guidance issued by EPA related to the matters addressed in this Consent Decree.

254. Imminent and Substantial Endangerment. Nothing in this Consent Decree shall be construed to limit the authority of the United States to undertake any action against any person, including TOTAL, to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

## **XXI. GENERAL PROVISIONS**

255. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve TOTAL of its obligations to comply with all applicable federal, state, and local laws and regulations, including, but not limited to, more stringent standards. In addition, nothing in this Consent Decree shall be construed to prohibit or prevent the United States from developing, implementing, and enforcing more stringent standards subsequent to the Date of Lodging of this Consent Decree through rulemaking, the permit process, or as otherwise authorized or required under federal, state, or local laws and regulations. Subject to Part XX and Paragraphs 152 and 257, nothing contained in this Consent Decree shall be construed to prevent or limit the right of the United States to seek or obtain other remedies or sanctions available under federal, state, or local statutes or regulations by virtue of TOTAL's violation of this Consent Decree or of the statutes and regulations upon which this Consent Decree is based, or for TOTAL's violations of any applicable provision of law. This shall include the right of the United States to invoke the authority of the Court to order TOTAL's compliance with this Consent Decree in a subsequent contempt action. The requirements of this Consent Decree do

not exempt TOTAL from complying with any and all new or modified federal, state, and/or local statutory or regulatory requirements that may require technology, equipment, monitoring, or other upgrades after the Date of Lodging.

256. Startup, Shutdown, Malfunction. Notwithstanding the provisions in this Consent Decree regarding startup, shutdown, and malfunction, the Decree does not exempt TOTAL from the requirements of state laws and regulations or from the requirements of any permits or plan approvals issued to TOTAL as such laws, regulations, permits, and/or plan approvals may apply to startups, shutdowns, and malfunctions at the Refinery.

257. Post-Permit Violations. Nothing in this Consent Decree shall be construed to prevent or limit the right of the United States to seek injunctive or monetary relief for violations of limits that have been incorporated into permits pursuant to this Consent Decree; provided, however, that with respect to monetary relief, the United States must elect between filing a new action for such monetary relief or seeking stipulated penalties under this Consent Decree, if stipulated penalties also are available for the alleged violation(s).

258. Failure of Compliance. The United States does not, by its consent to the entry of this Consent Decree, warrant or aver in any manner that TOTAL's complete compliance with the terms of the Decree will result in compliance with the provisions of the CAA or comparable state statutes and regulations. Notwithstanding the review or approval by EPA of any plans, reports, policies, or procedures formulated pursuant to this Consent Decree, TOTAL shall remain solely responsible for compliance with the terms of this Consent Decree, with all applicable permits, and with all applicable federal, state, and local laws and regulations.

258A. Alternative Monitoring Plans. Wherever this Consent Decree requires or permits TOTAL to submit an AMP to EPA for approval, TOTAL will submit a complete AMP

application. If an AMP is not approved, then within 90 days of TOTAL's receipt of disapproval, TOTAL will submit to EPA for approval a plan and schedule that provide for compliance with the applicable monitoring requirements as soon as practicable. Such plan may include a revised AMP application, physical or operational changes to the equipment, or additional or different monitoring.

259. Service of Process. TOTAL hereby agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including, but not limited to, service of a summons. The persons identified by TOTAL in Paragraph 264 are authorized to accept service of process with respect to all matters arising under or relating to this Consent Decree.

260. Post-Lodging, Pre-Entry Obligations. Obligations of TOTAL under this Consent Decree to perform duties after the Date of Lodging but prior to the Date of Entry shall be legally enforceable only on or after the Date of Entry. Liability for stipulated penalties, if applicable, shall accrue for violations of such obligations, and the United States may demand payment as provided in the Decree, provided that stipulated penalties accruing between the Date of Lodging and the Date of Entry may not be collected unless and until this Decree is entered by the Court.

261. Costs. Each Party to this action shall bear its own costs and attorneys' fees.

262. Public Documents. All information and documents submitted by TOTAL pursuant to this Consent Decree shall be subject to public inspection in accordance with applicable federal law, unless subject to legal privileges or protection, or identified and supported as trade secrets or business confidential information in accordance with the applicable federal statutes or regulations.

263. Public Notice and Comment. The Parties agree to this Consent Decree and agree that this Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 C.F.R. § 50.7, and upon notice to the Court from the United States Department of Justice requesting entry of this Consent Decree. The United States reserves the right to withdraw or withhold its consent to this Consent Decree if public comments disclose facts or considerations indicating that this Consent Decree is inappropriate, improper, or inadequate.

264. Notice. Unless otherwise provided herein, notifications to or communications between the Parties shall be deemed submitted on the date they are postmarked and sent by U.S. Mail, postage prepaid, except for notices under Part XVIII ("Force Majeure") and Part XIX ("Retention of Jurisdiction/Dispute Resolution"), which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Each report, study, notification, or other communication of TOTAL shall be submitted as specified in this Consent Decree. If the date for submission of a report, study, notification, or other communication falls on a Saturday, Sunday, or federal holiday, the report, study, notification, or other communication will be deemed timely if it is submitted the next Working Day. Except as otherwise provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree shall be addressed as follows:

As to the United States:

Chief

Environmental Enforcement Section

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611

Ben Franklin Station

Washington, DC 20044-7611

Reference Case No. 90-5-2-1-08283/3

Director  
Air Enforcement Division  
"AED" (2242A)  
Office of Enforcement and Compliance Assurance  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20004

Director  
Air Enforcement Division  
Office of Regulatory Enforcement  
c/o Matrix Environmental and Geotechnical Service  
215 Ridgedale Ave.  
Florham Park, NJ 07932

Chief  
Air, Toxics, and Inspections Coordination Branch  
U.S. Environmental Protection Agency, Region 6  
1445 Ross Ave.  
Dallas, TX 75202

with an electronic copy, in .pdf format, to:  
neichlin@matrixengineering.com  
cannon.elizabeth@epa.gov

As to TOTAL:  
Eric Miller  
Health, Safety, Environment & Quality Manager  
TOTAL PETROCHEMICALS USA, INC.  
Port Arthur Refinery  
P.O. Box 849  
Port Arthur, Texas 77641-0849

Pat Y. Spillman, Jr.  
Senior Attorney, Legal Department  
TOTAL PETROCHEMICALS USA, INC.  
P.O. Box 674411  
Houston, Texas 77267-4411

Any Party may change either the notice recipient or the address for providing notices to it by serving the other Party with a notice setting forth such new notice recipient or address. In addition, the nature and frequency of reports required by this Consent Decree may be modified by mutual consent of the Parties. The consent of the United States to such modification must be

in the form of a written notification from EPA, but need not be filed with the Court to be effective.

265. Approvals. All EPA approvals or comments required under this Consent Decree shall be in writing.

266. Paperwork Reduction Act. The information required to be maintained or submitted pursuant to this Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 et seq.

267. Modification. This Consent Decree contains the entire agreement of the Parties and will not be modified by any prior oral or written agreement, representation, or understanding. Prior drafts of this Consent Decree will not be used in any action involving the interpretation or enforcement of the Decree. Non-material modifications to this Consent Decree will be effective when signed by the United States and TOTAL. The United States will file non-material modifications with the Court on a periodic basis. For purposes of this Paragraph, non-material modifications include, but are not limited to, modifications to the frequency of reporting obligations and modifications to schedules that do not extend the date for compliance with emissions limitations following the installation of control equipment, provided that such changes are agreed upon in writing between the United States and TOTAL. Material modifications to this Consent Decree will be in writing, signed by the United States and TOTAL, and will be effective upon approval by the Court. Specific provisions in this Consent Decree that govern specific types of modifications shall be effective as set forth in the specific provision governing the modification.

## **XXII. TERMINATION**

268. This Consent Decree shall be subject to termination upon motion by the United States or TOTAL pursuant to Paragraph 269. Prior to seeking termination, TOTAL must have completed and satisfied all of the following requirements of this Consent Decree:

- (i) installation of control technology systems as specified in this Consent Decree;
- (ii) compliance with all provisions contained in this Consent Decree;
- (iii) payment of all penalties and other monetary obligations due under the terms of this Consent Decree, with no penalties or other monetary obligations due hereunder outstanding or owed;
- (iv) completion of the Supplemental Environmental Project as set forth in Part XII;
- (v) application for and receipt of permits incorporating all surviving emission limits and standards established under this Consent Decree; and
- (vi) operation for at least one year of each unit in compliance with the emission limits established in this Consent Decree, and certification of such compliance for each unit within the first progress report following the conclusion of the compliance period.

269. At such time as TOTAL believes that it has satisfied the requirements for termination set forth in Paragraph 268, TOTAL shall certify such compliance and completion to the United States in writing. TOTAL's certification shall contain the following statement, signed by a responsible corporate official of TOTAL:

To the best of my knowledge, after appropriate investigation, I certify that the information contained in or accompanying this submission is true, accurate and complete. I am aware that there are penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Unless, within 120 days of receipt of TOTAL's certification under this Paragraph, the United States objects in writing, the Court may upon motion by TOTAL order that this Consent Decree be terminated. If the United States objects to the certification by TOTAL, the matter shall be submitted to the Court for resolution under Part XIX. In such case, TOTAL shall bear the burden of proving that this Consent Decree should be terminated.

### **XXIII. SIGNATORIES**

270. Each of the undersigned representatives certifies that he or she is fully authorized to enter into this Consent Decree on behalf of the applicable Party, and to execute and to bind such Party to this Consent Decree.

Dated and entered this \_\_\_\_\_ day of \_\_\_\_\_, 2007.

\_\_\_\_\_  
UNITED STATES DISTRICT JUDGE

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. TOTAL Petrochemicals USA, Inc.

FOR PLAINTIFF THE UNITED STATES OF  
AMERICA:

Date:

3/29/07

\_\_\_\_\_  
MATTHEW J. MCKEOWN  
Acting Assistant Attorney General  
Environment and Natural Resources Division  
United States Department of Justice

Date:

March 8, 2007

\_\_\_\_\_  
KATHERINE M. KANE  
SCOTT D. BAUER  
Trial Attorneys  
Environmental Enforcement Section  
Environment and Natural Resources Division  
United States Department of Justice  
P.O. Box 7611  
Ben Franklin Station  
Washington, D.C. 20044-7611  
(202) 514-4133

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. TOTAL Petrochemicals USA, Inc.

FOR PLAINTIFF THE UNITED STATES OF  
AMERICA:

Date: \_\_\_\_\_

\_\_\_\_\_  
MATTHEW D. ORWIG  
United States Attorney  
Eastern District of Texas  
350 Magnolia Avenue, Suite 150  
Beaumont, TX 77701

Date: \_\_\_\_\_

\_\_\_\_\_  
MICHAEL LOCKHART  
Assistant United States Attorney  
Eastern District of Texas  
350 Magnolia Avenue, Suite 150  
Beaumont, TX 77701  
(409) 839-2538

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. TOTAL Petrochemicals USA, Inc.

FOR PLAINTIFF THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY:

Date: February 12, 2007

GRANTA Y. NAKAYAMA

Assistant Administrator  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency  
Washington, D.C. 20460

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. TOTAL Petrochemicals USA, Inc.

FOR PLAINTIFF THE UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY,  
REGION VI:

Date: \_\_\_\_\_

1/4/07

 \_\_\_\_\_  
JOHN BLEVINS

Director

Compliance Assurance and Enforcement Division

United States Environmental Protection Agency

Region VI

1445 Ross Ave.

Dallas, TX 75202

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States v. TOTAL Petrochemicals USA, Inc.

FOR DEFENDANT TOTAL PETROCHEMICALS  
USA, INC.:

Date: 21 December 2006

DARRELL JACOB  
Refinery Manager  
TOTAL Petrochemicals USA, Inc.  
P.O. Box 849  
Port Arthur, Texas 77641

Date: December 21, 2006

GEORGE O. WILKINSON, ESQ.  
Vinson & Elkins, L.L.P.  
2300 First City Tower  
1001 Fannin Street  
Houston, Texas 77002-6760  
ATTORNEYS FOR TOTAL PETROCHEMICALS  
USA, INC.

## APPENDIX A

### Initial Inventory of Covered Heaters and Boilers

<u>UNIT</u>	<u>Source Type</u>	<u>Emission Point Number (EPN)</u>	<u>Description</u>	<u>Current NOx Limit (lb/MMBtu)</u>	<u>CEM Equipped and Operational</u>	<u>Annualized Heat Input MMBtu/hr</u>
No. 1 Crude	Heater	01ACU1H101	ACU-1 Charge, H-101 <sup>2</sup>	0.08	Y	145.00
No. 2 Crude	Heater	02ACU2H201	ACU-2 Charge, H-201 <sup>2</sup>	0.077	N	129.00
No. 1 Crude	Heater	01ACU1202A	ACU-1 Charge, H-202A	0.060	N	187.00
No. 1 Crude	Heater	01ACU1202B	ACU-1 Charge, H-202B	0.060	N	187.00
Vaccum 1	Heater	01VACTH301	Vacuum Charge, H-301 <sup>2</sup>	0.100	N	105.00
Demex	Heater	10DEMEXH-2	DEMEX Asphalt, 3H-2	0.060	N	64.08
Demex	Heater	10DEMEXH-4	DEMEX DMO Phase, 3H-4 <sup>2</sup>	0.120	N	79.00
Unibon	Heater	13UNIBH301	Unibon Charge, 13H-1	0.120	N	100.00
NHT 1	Heater	17NHTHTRS	NHT 17H-101 <sup>2</sup>	0.100	N	56.60
NHT 1	Heater	17NHTHTRS	NHT 17H-102 <sup>2</sup>	0.100	N	69.00
Reformer	Heater	17NHTHTRS	Reformer Charge 1 <sup>1,2</sup>	0.680	Y	127.16
Reformer	Heater	17NHTHTRS	Reformer Charge 2 <sup>1,2</sup>	0.650	Y	144.12
Reformer	Heater	17NHTHTRS	Reformer Charge 3 <sup>1,2</sup>	0.600	Y	79.52
Reformer	Heater	17NHTHTRS	Reformer Charge 4 <sup>1,2</sup>	0.500	Y	56.21
BTX	Heater	04BTXH-53	Xylene Trim Heater, 4H-53	0.600	N	65.00
BTX	Heater	04BTXH-52	Toluene Trim Heater, 4H-52	0.600	N	63.00
DHT 1	Heater	51DHT1H-1	DHT Charge, 51H-1	0.400	N	46.44
DHT 2	Heater	52DHT2H-1	DHT-2 Charge, 52H-1	0.035	N	46.45
DHT 2	Heater	52DHT2H-2	DHT-2 Florida, 52H-2	0.035	N	52.63
Condensate Heater	Heater	40CSPLTH-1	Condensate Splitter H-1	0.056	Y	190.41
Utility	Boiler	61BLRH300	Boiler H-300 <sup>3</sup>	0.035	Y	207.00
Utility	Boiler	61BLRH350	Boiler H-350 <sup>3</sup>	0.035	Y	207.00

<sup>1</sup> Heaters routed to common stack – CEMS on common stack.

<sup>2</sup> NOx Controls proposed on heaters for netting on NSR Permit (#N067) submitted on June 20, 2006, to the EPA/TCEQ. TOTAL may use 106 tons or less of offsets from NOx emissions from these heaters for the offsets required by NSR Permit application #N067 should a permit be issued under that application or under another application for the same project.

<sup>3</sup> Boilers routed to common stack – CEMS on common stack.

## **APPENDIX B**

### **Flaring Project Descriptions**

In addition to the other requirements in Part VI of the Consent Decree, TOTAL has previously implemented and shall implement the following specific projects to reduce flaring incidents at the Refinery.

#### **Previously implemented flaring reduction projects**

1. Refinery Sour Gas Processing Project

TOTAL completed a project to improve the reliability of its sour gas processing system and added a second sour gas compressor which is designated C-200A. The C200 compressor serves as a spare compressor when the need arises for preventative maintenance of C-200A or a trip of the primary compressor occurs.

2. Fuel Gas Recovery System Project

TOTAL commissioned in 2003 a fuel gas recovery system ("FGRS"). The FGRS includes, among other ancillary equipment, liquid knockout vessels and additional gas compression. The FGRS is designed to recover and process routine vent releases and upset emissions and compress the gases into the refinery fuel gas treatment system.

3. Compressor Reliability Project.

TOTAL undertook projects to improve the reliability of three compressors in November 2006:

a. Wet Gas Compressor: TOTAL completed in November 2006 the installation of a new Bentley Nevada vibration monitoring system, and installed a new Allen Bradley control system. The Allen Bradley system includes first-out indication, real-time trending, and historical trending capabilities. TOTAL also replaced compressor surge controllers. In addition to the instrumentation upgrade, the compressor was completely overhauled including the installation of new seals, bearings, and filters. The gear box was pulled, inspected, and repaired as necessary.

b. Main Air Blower: TOTAL installed a new main air blower, motor, and Allen Bradley control system, which includes first-out indication, real-time trending, and historical trending capabilities. Included in the upgrade was a new switch gear building. TOTAL also replaced the old motor with a new 22,000 horse power motor.

c. Reformer Hydrogen Compressor: In December 2006, to improve the reliability of the Reformer Hydrogen Compressor, TOTAL replaced 28 valves on the suction and discharge side, and completely re-wound the compressor motor. Reliability issues with the compressor motor were traced back to faults in the motor windings.

#### On-going and future flaring reduction projects

##### 4. Electrical Reliability Project

TOTAL shall continue to implement a program to improve the reliability of its electrical supply. By 24 months after the Date of Entry, TOTAL shall install lightning dissipaters at the two electrical substations serving the Refinery. By 24 months after the Date of Entry, TOTAL shall upgrade power supply to the Fuel Gas Recovery Compressors by adding a dedicated electrical feed to each compressor. By 36 months after the Date of Entry, TOTAL shall complete the 480 volt motor Auto-restart project by installing restart devices on selected 480 volt motors.

TOTAL will report on the progress of the specific tasks in this Project in each quarterly report pursuant to Part XIII of the Consent Decree.

After all tasks are complete, TOTAL will submit a final report on the Electrical Reliability Project as part of the first Part XIII quarterly report due at least 60 days after completion of the Project.

##### 5. Sulfur Recovery Plant Reliability Improvement Project

TOTAL shall complete a reliability team evaluation of its Sulfur Recovery Plant within 120 days after the Date of Entry. The reliability team shall identify recommendations that may improve the reliability of the Refinery Sulfur Recovery Plant. TOTAL is not required to undertake every reliability project considered in the study. TOTAL shall identify projects that collectively would improve reliability of the Sulfur Recovery Plant.

By 120 days after the Date of Entry, TOTAL shall submit to EPA a report including:

- (i) a list of projects identified by the team to be undertaken under the Sulfur Recovery Plant Reliability Improvement project;
- (ii) a description of how the reliability team performed its evaluation;
- (iii) a list of all of the recommendations that the team made;
- (iv) a description of how TOTAL selected from the recommendations made by the reliability team the projects it will perform and why any recommended projects were not selected; and
- (v) A schedule for completing all selected projects.

TOTAL will complete the selected projects on the schedules proposed in the final reliability team report.

TOTAL will report on the progress of the selected projects in each quarterly report pursuant to Part XIII.

After all selected projects are completed, TOTAL will submit a final report on the SRP Reliability Improvement Project as part of the first Part XIII quarterly report due at least 60 days following completion of the Project

## 6. Critical Flaring Equipment Identification Project

TOTAL shall develop and submit to EPA by December 31, 2011, a list of critical equipment that includes critical flaring equipment, which is any equipment the failure of which could result in a Flaring Incident. TOTAL shall identify critical flaring equipment during the Process Hazard Assessment ("PHA") revalidation process for each Refinery process unit using the Refinery's PHA protocol, and any such equipment shall be placed on the Refinery's critical equipment list. Within 6 months after identifying a particular piece of equipment as critical flaring equipment, TOTAL shall develop a preventative maintenance and inspection action plan. The preventative maintenance and inspection schedule may either be specific to particular pieces of equipment or be designated to apply to multiple pieces of similar equipment.

In the Part XIII quarterly report for the first quarter of each year between 2008 and 2012, TOTAL will list all critical flaring equipment identified through the Critical Flaring Equipment Identification Project in the previous year and describe the preventative maintenance and inspection action plan developed for each such piece of equipment (or for multiple pieces of similar equipment). If the preventative maintenance and inspection action plan for a particular piece of equipment is not due to be completed by the time that the quarterly report for the first quarter of a particular year is due then TOTAL shall report on the preventative maintenance and inspection action plan in the first quarterly report that is due at least 30 days after the deadline for completion of the action plan.

## 7. Reliability Equipment Identification and Installation Project

During the Refinery's PHA revalidation process, TOTAL shall develop by December 31, 2011, a list of equipment (1) that has an anticipated service life less than the planned interval between turnarounds for the unit with which the equipment is associated, (2) that could not be maintained, repaired, or replaced while the unit with which the equipment is associated is operating, and (3) the failure of which could cause a flaring incident ("Reliability Equipment"). For up to 10 pieces of Reliability Equipment, TOTAL shall install spares or make other modifications so that the equipment no longer qualifies as Reliability Equipment. As an alternative to the PHA revalidation process, TOTAL may also identify Reliability Equipment through the root cause analysis required by Paragraph 44 or through other Refinery activities.

In the Part XIII quarterly report for the first quarter of each year between 2008 and 2012, TOTAL will list all such equipment identified in the previous year. For equipment selected for corrective action, TOTAL will propose a schedule pursuant to which a spare for such equipment is installed or other corrective measures taken by the next scheduled turnaround for the unit with which the equipment is associated, but in any event, no later than December 31, 2012. TOTAL may select Reliability Equipment identified in prior years for remedial projects.

TOTAL will complete the installation of the identified spare equipment on the proposed schedules.

8. Sour Water Storage Capacity Project

If TOTAL elects to proceed with its planned Deep Conversion Project ("DCP"), TOTAL shall evaluate the adequacy of the sour water storage capacity and take corrective actions prior to start-up of the DCP unit as may be necessary to prevent flaring incidents with a root cause of sour water storage capacity.

In the first Part XIII quarterly report following the completion of Total's evaluation of the adequacy of sour water storage capacity associated with the planned DCP, Total will describe any corrective action it chose to take to prevent flaring incidents with a root cause of inadequate sour water storage capacity

## **APPENDIX C**

### **Refinery Tanks for Sealing Boot Installation**

<b>Refinery Tank #</b>	<b>Service</b>	<b>Constructed Tank Capacity (bbl)</b>
1000	Sour Water	54,419
1001	Sour Water	24,999
906	Alkylate	25,604
907	Alkylate	25,604
563	Lt.Cat. Naptha	85,660
562	Hvy.Cat. Naptha	85,660
938	Cat.Naptha	120,636
504	Recovered Oil	21,363
506	Naptha Ref. Feed	38,297
503	Recovered Oil	21,363
502	Lt. Raffinate	21,363
505	Recovered Oil	16,796
2002	Atosol	13,170
2001	Atosol	13,170
477	Crude	180,699
500A	Storm Water	164,773
500B	Storm Water	164,773
479	Crude	180,699
525	Gasoline	81,287
480	Crude	342,380
481	Crude	342,380
476	Crude	131,682

910	Alkylate	82,133
455	Crude	201,077
454	Crude	201,077
543	Jet	80,621
542	Gasoline	80,621
935	Gasoline	134,151
453	Crude	201,077
452	Crude	201,077
4480	Diesel	222,325
4481	Gasoline	222,325
4482	Gasoline	222,325

## **APPENDIX D**

### **Work Plan for Infrared Imaging Supplemental Environmental Project, Parts I and II**

#### **Part I: Imaging of Components Subject to LDAR (Items A - F)**

A. TOTAL must examine each Refinery component subject to the LDAR regulations with a passive, infrared imaging camera. TOTAL must retain the services of an experienced camera operator to conduct this examination, and TOTAL and EPA must agree that the selected operator is qualified for the job. TOTAL and EPA shall agree in writing (in advance) on the imaging camera used for this Project. In conducting Part I of this Project, the camera must be operated within allowed specifications, ranges of tolerance, and/or conditions prescribed by the manufacturer and/or operator for proper operation in a petroleum refinery.

B. TOTAL contemporaneously will monitor, using Method 21, at least 1,000 of the components examined by the camera. The 1,000 components contemporaneously examined by the camera and monitored by Method 21 shall include any component from which the camera indicates the presence of an emission of volatile organic compounds, up to a maximum of 500 such components. The remaining 1,000 components contemporaneously examined by the camera and monitored by Method 21 shall include components from which the camera does not indicate the presence of an emission of volatile organic compounds.

C. For any component that a Method 21 examination indicates emissions of volatile organic compounds at a rate or level greater than the applicable LDAR limit, TOTAL must comply with all applicable requirements of this Consent Decree and the LDAR regulations.

D. If TOTAL timely and properly completes the steps required by Items A, B, and C, above, and if TOTAL then concludes that the components requiring correction or repair under Item C cannot be accomplished on the applicable regulatory or Consent Decree schedule,

consistent with regular operation of the Refinery, then TOTAL may request from EPA Region 6 an extension in the time allowed to complete the requirements of Item C. Such request must be made in writing and explain with particularity the need for additional time and must provide for as short a schedule as practicable, consistent with orderly completion of repairs and operation of the Refinery.

E. TOTAL must comply with all applicable requirements for Part I of this Project that are set forth in Part XII, Section A of the Consent Decree, including submission of required reports.

F. TOTAL shall give EPA Region 6 at least three weeks advance notice of the date on which the use of the infrared camera imaging and/or Method 21 monitoring pursuant to this Project will commence. Consistent with all established Refinery safety procedures and prerequisites, TOTAL shall allow representatives of EPA Region 6 and NEIC to attend, at any and all times, with the individuals (contractors and/or employees) conducting preparatory work and/or the camera imaging and LDAR monitoring required under Part I of this Project.

#### Part II: Imaging of Refinery Operations Not Subject to LDAR (Items G - J)

G. In addition to the camera imaging and monitoring required in Part I above, TOTAL must examine each Refinery component that contains or can contain volatile organic compounds (other than the components subject to the LDAR regulations) with a passive, infrared imaging camera. TOTAL is not required to examine Refinery components on a component by component basis, so long as the examination is conducted by an operator and with a camera that meets the requirements of Part I and such operator follows suitable procedures for examining the areas to be imaged under this Part of the Project. Consistent with these terms, TOTAL may

examine Refinery components from selected vantage points that allow areas within the Refinery to be examined as a whole. TOTAL is not required to number each individual component while examining Refinery components under Part II of the Project, so long as the examination is completed in a fashion that allows for effective use of the examination and any recording of it in performing the work called for by this Consent Decree.

H. TOTAL will provide EPA the same notice and opportunity to participate with respect to the work under Part II of this Project that it provides, pursuant to Paragraph F above, with respect to the work under Part I.

I. TOTAL must eliminate the emissions identified by Part II of this Project unless either: 1) such emissions are allowed by law; or 2) TOTAL and the United States agree, in writing, that the elimination of a particular emission source is impracticable because it is inherent in the proper design, construction, and operation of the Refinery. Nothing in the Consent Decree, however, bars any other option available to the United States to eliminate such an emission or emission source.

J. Nothing in this Consent Decree is intended to limit or disqualify TOTAL, on the grounds that information was not discovered and supplied voluntarily, from seeking to apply EPA's Audit Policy or any state audit policy to any violations or non-compliance TOTAL discovers during the course of any investigation, audit, or enhanced monitoring that TOTAL is required to undertake for Part II of this Project.